

AGENDA
BOARD OF CITY COMMISSIONERS
JANUARY 21, 2025 AT 6:00 PM
COMMISSION CHAMBERS AT CITY HALL
16 WEST 9TH STREET
SHAWNEE, OKLAHOMA

Official action can only be taken on items which appear on the agenda. The public body may adopt, approve, ratify, deny, defer, recommend, amend, strike, or continue any agenda item. When more information is needed to act on an item, the public body may refer the matter to Staff or back to Committee or the recommending body. Under certain circumstances, items are deferred to a future date or stricken from the agenda entirely.

CALL TO ORDER

DECLARATION OF A QUORUM

INVOCATION

FLAG SALUTE

1. Citizens Participation (A three-minute limit per person)
(A twelve-minute limit per topic)

Citizens may provide comment relevant to City business. Per Oklahoma State Statute 25 O.S. § 311(B)(1), the City Commission may only consider, deliberate, or render decisions on those items of City business that were included in the agenda. For other citizen comments, the City Commission may refer the matter to the City Manager for administrative consideration, or to schedule the matter for Commission consideration at a later date.

2. Consider approval of Consent Agenda:

- a. Minutes from the December 16, 2024, regular meeting.
- b. Acknowledge the following minutes and reports:
 - Shawnee Beautification, Parks, and Recreation Committee Minutes from the November 21, 2024 regular meeting.
 - License Payment Report for December 2024.
 - Project Payment Report for December 2024.
- c. Budget amendments for Fiscal Year 2024 – 2025:

- Fund 603 - Insurance Recovery - To appropriate insurance proceeds for traffic signal cabinet claim.
- Fund 706 - Donations - To appropriate donations received by the Police Department for use in Fiscal Year 2024-2025.
- Fund 113 - Drug Forfeiture (State) - To appropriate funds to cover K-9 funeral expenses.

d. Mayor Appointments:

Shawnee Housing Authority

Cyndi Berger 1st Full Term Expires: February 1, 2028
Replaces Mike Vorndran, Term Expired

Shawnee Urban Renewal Authority

Sydney Davidson 1st Full Term Expires: February 2, 2028
Reappointment

- e. Approval of the purchase of a traffic control service truck utilizing state bid pricing for the Public Works Department.
- f. Approval of the purchase of Genesis extrication tools from Equipment Management Company for the Fire Department.
- g. Approval of a lease agreement between the City of Shawnee and Enterprise FM Trust to replace vehicles for the Police Department.
- h. Approval of a Task Order in accordance with the agreement between the City of Shawnee and Cowan Group Engineering, LLC for Water System Improvements along Walnut Street.

3. Mayor's Proclamation(s)

- a. "School Board Appreciation Month", January 2025
- b. "United Acts of Kindness Day", February 14, 2025

4. Presentation of the Pet of the Month by Animal Control.

5. Consideration of a Change Order with Conrad Fire Equipment from a Commercial Rescue Vehicle to a Light Duty Rescue Vehicle.

6. Consideration of a resolution approving the purchase of Ford F550 Skeeter Rescue from Conrad Fire Equipment under the Cooperative Purchasing Agreement with Houston-Galveston Area Council (HGAC).
7. Consideration of renewal contract with Latham Consulting Group and Dunnington Consulting for legislative consulting services. (*Deferred from the December 16, 2024, regular meeting.*)
8. Consider Bid(s):
 - a. North Midland Addition Water Line Replacement (Award)
9. Acknowledge Monthly Sales Tax and Budget Reports.
10. Administrative Report(s):
 - a. Short-Term Rentals and the Occupancy Tax - Stacy Moore, Director of Tourism
 - b. Presentation of the Quarterly 2018 Half-Cent Sales Tax Report - Kimberly Smith, Finance Director
11. New Business (Any matter not known or which could not have been reasonably foreseen prior to the posting of the agenda.)
12. Commissioners Comments
13. Consider an executive session in accordance with 25 O.S. § 307(B)(4) to discuss confidential communications between a public body and its attorney concerning a pending investigation, claim, or action if the public body, with the advice of its attorney, determines that disclosure will seriously impair the ability of the public body to process the claim or conduct a pending investigation, litigation, or proceeding in the public interest, specifically regarding Pottawatomie County Case No. CJ-2023-468 relating to the Fairview Mausoleum.
14. Consider an executive session to discuss a confidential personnel matter relating to the City Manager pursuant to 25 O.S. § 307 (B)(1) "Discussing the employment, hiring, appointment, promotion, demotion, disciplining, or resignation of any individual salaried public officer or employee."

15. Consider matters discussed in executive session in accordance with 25 O.S. § 307(B)(4) to discuss confidential communications between a public body and its attorney concerning a pending investigation, claim, or action if the public body, with the advice of its attorney, determines that disclosure will seriously impair the ability of the public body to process the claim or conduct a pending investigation, litigation, or proceeding in the public interest, specifically regarding Pottawatomie County Case No. CJ-2023-468 relating to the Fairview Mausoleum.
16. Consider matters discussed in executive session relating to a confidential personnel matter relating to the City Manager pursuant to 25 O.S. § 307 (B)(1) "Discussing the employment, hiring, appointment, promotion, demotion, disciplining, or resignation of any individual salaried public officer or employee."
17. Adjournment

Respectfully submitted,



Lisa Lasyone, MMC, City Clerk

The City of Shawnee encourages participation from its citizens in public meetings. If participation is not possible due to a disability, notify the City Clerk, in writing, at least forty-eight hours prior to the scheduled meeting, and necessary accommodations will be made. (ADA 28 CFR 36)

DRAFT

BOARD OF CITY COMMISSIONERS PROCEEDINGS

DECEMBER 16, 2024 AT 6:00 PM

The Board of City Commissioners of the City of Shawnee, County of Pottawatomie, State of Oklahoma, met in Regular Session in the Commission Chambers at City Hall, 16 West 9th Street, Shawnee, Oklahoma on Monday, December 16, 2024, at 6:00 PM, pursuant to notice duly posted as prescribed by law on Thursday, December 12, 2024, at 7:14 PM. Mayor Stephens presided and called the meeting to order. Upon roll call, the following members were in attendance.

Eric Stephens

Mayor

Daniel Matthews

Commissioner Ward 1 - Vice Mayor

Greta Madson

Commissioner Ward 2

Absent

Commissioner Ward 3

Ashley Fichtner

Commissioner Ward 4

Mark Sehorn

Commissioner Ward 5

Lauren Richter

Commissioner Ward 6

ABSENT: Chris Odneal

CALL TO ORDER

DECLARATION OF A QUORUM

INVOCATION

FLAG SALUTE

1. Citizens Participation (A three-minute limit per person)
(A twelve-minute limit per topic)

Citizens may provide comment relevant to City business. Per Oklahoma State Statute 25 O.S. § 311(B)(1), the City Commission may only consider, deliberate, or render decisions on those items of City business that were included in the agenda. For other citizen comments, the City Commission may refer the matter to the City Manager for administrative consideration, or to schedule the matter for Commission consideration at a later date.

Ms. Theresa Cody, Ms. Edwina Butler-Wolfe, Ms. Melissa Dennis, Mr. Rob Morris, Ms. Cyndi Berger, Mr. Dell Kerbs, and Mr. Glenn Peck spoke during Citizens Participation.

2. Consider approval of Consent Agenda:

a. Minutes from the November 18, 2024, regular meeting and December 9, 2024, special call meeting.

b. Acknowledge the following minutes and reports:

- Planning Commission Minutes from the October 2, 2024, regular meeting.
- Shawnee Beautification, Parks, and Recreation Committee Minutes from the September 19, 2024, regular meeting.
- License Payment Report for November 2024.
- Project Payment Report for November 2024.

c. Budget amendments for Fiscal Year 2024 – 2025:

- Fund 603 - Insurance Recovery - To appropriate insurance proceeds received for traffic pole claim.

d. Mayor Appointments:

Shawnee Hospital Authority

Ron Sharp 1st Partial Term

Replaces Mike Warwick, Deceased

Expires: September 30, 2028

- e. Acknowledgment of Assistant City Manager Mark Simpson as City of Shawnee member for the REACT board.
- f. Approve renewal of contract with Latham Consulting Group and Dunnington Consulting for legislative consulting services.

The Mayor requested that Consent Agenda Item No. 2(f) be pulled for separate consideration.

A motion was made by Mayor Stephens, seconded by Commissioner Fichtner, to approve Consent Agenda Item Nos. 2(a-e, less f). Motion carried 6-0-0.

AYE: Stephens, Fichtner, Sehorn, Richter, Matthews, Madson

NAY: None

ABSTAIN: None

Discussion was held among the Board regarding Consent Agenda Item No. 2(f).

A motion was made by Mayor Stephens, seconded by Commissioner Fichtner, to defer Consent Agenda Item No. 2(f) to a future meeting. Motion carried 4-2-0.

AYE: Stephens, Fichtner, Richter, Madson

NAY: Matthews, Sehorn

ABSTAIN: None

3. Presentation of the Pet of the Month by Animal Control.

Animal Control Officer Theresa Touchet introduced Sarah, an approximately eight (8) month old German Shepherd mix.

4. Acknowledgment of the Oklahoma Municipal League's Honor Roll of Service for Twenty-Five Years of Service to the City of Shawnee.

City Manager Andrea Weckmueller-Behringer recognized the following City employees that have completed twenty-five (25) or more years of public service.

- Jennifer Greenland - 26 years of service
- Todd Luster - 27 years of service

- Terry Moore - 29 years of service
- James Palinkas - 29 years of service

Ms. Greenland and Mr. Moore were present to accept the Certificates and lapel pins presented by the Mayor.

5. Presentation by the Pottawatomie County School Superintendents regarding the importance of education funding and the proposed April 1, 2025, election for the continuation of the county sales tax of 0.00495-cent "Education Money," which is set to expire in June 2026.

The following Pottawatomie County School Superintendents spoke regarding the importance of education funding and the proposed April 1, 2025, election for the continuation of the county sales tax of "Education Money":

- Blake Moody, North Rock Creek Public Schools
- Robert Kinsey, Tecumseh Public Schools
- Will Jones, Dale Public Schools
- Sally Thomason, Pleasant Grove Public Schools
- Teresa Wilkerson, Acting Superintendent of Shawnee Public Schools
- Matt Posey, Bethel Public Schools
- Cindy White, Maud Public Schools
- Rhonda Hockenbury, McLoud Public Schools
- Ryan Rosser, South Rock Creek Public Schools
- Scott Douthit, Wanette Public Schools
- Jason Alsup, Asher Public Schools
- Ryan Friend, Earlsboro Public Schools
- Matt Riggs, Macomb Public Schools
- Mark Bowlan, Grove Public Schools
- Rick Gowin, President of North Rock Creek Public Schools Board of Education

6. Public Hearing on an Amendment to the City of Shawnee Five-Year Capital Improvement Plan (CIP) for Fiscal Years 2025 through 2029, encompassing multiple changes.

Finance Director Kimberly Smith stated that the CIP for Fiscal Years 2025 through 2029 was adopted on June 17, 2024. Staff is requesting an amendment to

the CIP for the following funds/projects:

- Fund 301 - Capital Improvement Fund Projects
- Fund 302 - Street Improvement Fund Projects
- Fund 303 - 2018 Capital Improvement Fund Project
- Fund 304/501 - American Rescue Plan/Shawnee Municipal Authority Funds Project
- Fund 501 - Shawnee Municipal Authority Fund Project

Mayor Stephens declared a public hearing in session to consider an amendment to the City of Shawnee's Five-Year Capital Improvement Plan for Fiscal Years 2025 through 2029, encompassing multiple changes. Mr. Rob Morris spoke during the public hearing. The public hearing was closed.

7. Consideration of an Amendment to the City of Shawnee Five-Year Capital Improvement Plan (CIP) for Fiscal Years 2025 through 2029, encompassing multiple changes.

Finance Director Kimberly Smith stated Staff is requesting an amendment to the following, previously approved projects:

- Boy Scout Park
- Kayak Dock Area Improvements
- Police Department Fleet
- High Mast Light Replacement
- Main Street Bridge Replacement
- Unit Rate - Paving and Drainage

In addition, Staff is requesting the addition of the following projects:

- Optimist Park
- Expo Fleet Acquisition – 3/4 Ton Truck
- Walnut Street Water Line
- SW Loop Water Main

Discussion was held among the Commission and Staff.

A motion was made by Mayor Stephens to approve the proposed amendment to the City of Shawnee Five-Year CIP for FY2025-2029 less the proposed change for 3/4 ton truck for Expo Fleet. Motion failed for lack of a second.

Further discussion was held among the Commission and Staff.

A motion was made by Vice Mayor Matthews, seconded by Commissioner Sehorn, to approve an Amendment to the City of Shawnee Five-Year Capital Improvement Plan (CIP) for Fiscal Years 2025 through 2029, as proposed. Motion failed 3-3-0.

AYE: Matthews, Sehorn, Stephens

NAY: Madson, Fichtner, Richter

ABSTAIN: None

A motion was made by Commissioner Madson, seconded by Commissioner Fichtner, to approve an Amendment to the City of Shawnee Five-Year Capital Improvement Plan (CIP) for Fiscal Years 2025 through 2029, as proposed less the Kayak Dock Improvements and 3/4 ton truck for Expo Fleet. Motion carried 4-2-0.

AYE: Madson, Fichtner, Richter, Stephens

NAY: Matthews, Sehorn

ABSTAIN: None

8. Consideration of the following Budget Amendments regarding the City of Shawnee's Capital Improvement Plan (CIP) for Fiscal Years 2025 through 2029.

- a. Fund 303 - 2018 Capital Improvement Plan - adding Expo Fleet Acquisition - 3/4 Ton Truck to the Capital Improvement Plan
- b. Fund 304/502 - American Rescue Plan Association (ARPA)/Shawnee Municipal Authority/Capital Projects - adding Walnut Street to both ARPA and Shawnee Municipal Authority in the Capital Improvement Plan
- c. Fund 502 - Shawnee Municipal Authority/Capital Projects - adding SW Loop Water Main Project

Finance Director Kimberly Smith provided a staff report for the proposed budget amendments. Staff recommends approval of Agenda Item Nos. 8 b. and c.

A motion was made by Commissioner Madson, seconded by Commissioner Stephens, to approve the budget amendments listed in Agenda Item Nos. 8 b. and c. Motion carried 5-1-0.

AYE: Madson, Stephens, Fichtner, Sehorn, Richter

NAY: Matthews

ABSTAIN: None

9. Consideration and approval of the City Manager's hiring of James Kriwanek as the City's Fire Chief.

City Manager Andrea Weckmueller-Behringer stated she has extended an offer of employment to Interim Fire Chief James Kriwanek to be the City of Shawnee's next Fire Chief, subject to approval by the City Commission. In accordance with Article V, Section 2 of the City Charter, the appointment of a department head shall not become effective until approved by the Board of Commissioners.

A motion was made by Commissioner Fichtner, seconded by Commissioner Madson, to approve the City Manager's hiring of James Kriwanek as the City's Fire Chief. Motion carried 6-0-0.

AYE: Fichtner, Madson, Stephens, Sehorn, Richter, Matthews

NAY: None

ABSTAIN: None

10. Consideration of a contract between the City of Shawnee and Wall Engineering for Design Services associated with the SW Loop Water Main Project.

City Manager Andrea Weckmueller-Behringer stated that the project involves a 9,850-foot extension of a 12-inch water line, creating a crucial loop on the west side of Highway 177. The primary objectives of the project are to reduce water age, increase fire flow to the existing western system, and enhance water capacity for current customers. The contract with Wall Engineering for design is in the amount of Two Hundred Ninety-Nine Thousand Five Hundred Dollars (\$299,500.00) and the project scope will encompass:

- Survey
- Geotechnical Engineering
- Preliminary and Final Design
- Contract Documents, Bidding, and Procurement
- Construction Inspection and Engineering

- As-builts and Project Closeout

A motion was made by Commissioner Fichtner, seconded by Commissioner Richter, to approve a contract between the City of Shawnee and Wall Engineering for Design Services associated with the SW Loop Water Main Project. Motion carried 6-0-0.

AYE: Fichtner, Richter, Matthews, Madson, Stephens, Sehorn

NAY: None

ABSTAIN: None

11. Consideration of a Professional Services Agreement with Kimley-Horn and Associates, Inc. to provide design services for Wallace Street Sidewalk project.

City Manager Andrea Weckmueller-Behringer stated that as part of Fiscal Year 2025 of the City of Shawnee's Capital Improvement Plan (CIP), the Wallace Street Sidewalk project was identified for design initiation. Kimley-Horn submitted a proposal for engineering services to improve the sidewalk on the north side of Wallace Street, between Kickapoo and Harrison. The proposal's total cost is One Hundred Fifteen Thousand Dollars (\$115,000.00) and the project scope will encompass the following:

- Survey
- Final Plans
- Railroad Crossing Coordination

A motion was made by Commissioner Richter, seconded by Commissioner Fichtner, to approve a Professional Services Agreement with Kimley-Horn and Associates, Inc. to provide design services for Wallace Street Sidewalk project. Motion carried 6-0-0.

AYE: Richter, Fichtner, Sehorn, Matthews, Madson, Stephens

NAY: None

ABSTAIN: None

12. Consideration of an amendment to a contract with Landmark Construction to provide Construction Manager at Risk Services for the Shawnee Fire Department Station 3 Remodel.

Fire Chief James Kriwanek advised that in April 2024, the City Commission

authorized Staff to negotiate and enter into a contract for Construction Manager at Risk (CMAR) services for the Shawnee Fire Station 3 Remodel. CMAR is a delivery method that involves a commitment by the Construction Manager to deliver the project within a Guaranteed Maximum Price (GMP). The design stages of the project are nearing completion, and Construction Manager Landmark Construction Group, LLC has submitted a GMP for an amendment to the originally negotiated contract in the amount of One Million Seven Hundred Forty-Seven Thousand Four Hundred Thirty-One Dollars (\$1,747,431.00). The amendment will cover the total cost of construction, as well as Landmark's consulting fees.

A motion was made by Commissioner Fichtner, seconded by Commissioner Richter, to approve an amendment to a contract with Landmark Construction to provide Construction Manager at Risk Services for the Shawnee Fire Department Station 3 Remodel. Motion carried 6-0-0.

AYE: Fichtner, Richter, Matthews, Madson, Stephens, Sehorn

NAY: None

ABSTAIN: None

13. Consideration of a Memorandum of Understanding between the City of Shawnee and the Oklahoma Department of Mental Health and Substance Abuse Services related to the provision of overdose education, Naloxone distribution training, and overdose reversal kits.

City Manager Andrea Weckmueller-Behringer advised that the Memorandum of Understanding presented for consideration would allow for the cost-free distribution of Naloxone (overdose reversal kits) to the City of Shawnee.

A motion was made by Commissioner Fichtner, seconded by Mayor Stephens, to approve a Memorandum of Understanding between the City of Shawnee and the Oklahoma Department of Mental Health and Substance Abuse Services related to the provision of overdose education, Naloxone distribution training, and overdose reversal kits. Motion carried 6-0-0.

AYE: Fichtner, Stephens, Sehorn, Richter, Matthews, Madson

NAY: None

ABSTAIN: None

14. Consideration of an ordinance of the City of Shawnee, Oklahoma amending Section 16, Article II, Division 8 of the Shawnee Municipal Code; providing for repeal; providing for severability; providing for codification.

City Attorney Joe Vorndran stated that the proposed ordinance is related to potential assignments of lake lot leases when transfers are related to one of the following:

- Where the transfer is made to a trust of which the lessee is the grantor and owner of the assets and property for income and estate tax purposes;
- As a result of the administration of a trust or estate, or the probate of a will; or
- In cases where a lease has joint owners and one owner obtains full ownership rights.

A motion was made by Mayor Stephens, seconded by Commissioner Madson, to approve an ordinance of the City of Shawnee, Oklahoma amending Section 16, Article II, Division 8 of the Shawnee Municipal Code; providing for repeal; providing for severability; providing for codification.

Ordinance No. 2814NS was introduced.

AN ORDINANCE AMENDING CHAPTER 16, ARTICLE II, DIVISION 8 OF THE SHAWNEE MUNICIPAL CODE; PROVIDING FOR REPEAL; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR EMERGENCY.

Motion carried 6-0-0.

AYE: Stephens, Madson, Fichtner, Sehorn, Richter, Matthews

NAY: None

ABSTAIN: None

Ordinance No. 2814NS was adopted by the City Commission.

15. Consideration of an emergency clause as it relates to Agenda Item No. 14 for the protection of the public's health, safety, and welfare, an emergency is declared to exist per Oklahoma State Statute Title 11, Article XIV, Section 14-103.

A motion was made by Mayor Stephens, seconded by Commissioner Fichtner, to approve an emergency clause as it relates to Agenda Item No. 14 for the protection of the public's health, safety, and welfare, an emergency is declared to exist per Oklahoma State Statute Title 11, Article XIV, Section 14-103. Motion

carried 6-0-0.

AYE: Stephens, Fichtner, Sehorn, Richter, Matthews, Madson

NAY: None

ABSTAIN: None

16. Public hearing of a request to rezone property located at 3918 North Kickapoo from R-1 (Low-Density Residential District) to C-2 (Regional Commercial District).

Case No. RZ05-24 | Applicant: Erika Jones

(Deferred from November 18, 2024 City Commission meeting.)

Community Development Director Rian Harkins stated that the subject property is located at 3918 N Kickapoo on a major arterial corridor. The Planning Commission and Staff recommend approval.

Mayor Stephens declared a public hearing in session to consider rezoning property located at 3918 North Kickapoo from R-1 (Low-Density Residential District) to C-2 (Regional Commercial District). No one spoke for or against said rezoning. The public hearing was closed.

17. Consideration of an ordinance to rezone from R-1 (Low-Density Residential District) to C-2 (Regional Commercial District) for property located at 3918 Kickapoo Avenue.

Case No. RZ05-24 | Applicant: Erika Jones

Community Development Director Rian Harkins stated that the Planning Commission and Staff recommend approval.

A motion was made by Vice Mayor Matthews, seconded by Commissioner Richter, to approve an ordinance to rezone from R-1 (Low-Density Residential District) to C-2 (Regional Commercial District) for property located at 3918 Kickapoo Avenue.

Ordinance No. 2815NS was introduced.

AN ORDINANCE CONCERNING THE ZONING CLASSIFICATION OF THE FOLLOWING DESCRIBED PROPERTY LOCATED WITHIN THE CORPORATE LIMITS OF THE CITY OF SHAWNEE, POTTAWATOMIE COUNTY, OKLAHOMA, TO-WIT: LOT THREE, BLOCK ONE, COLLEGE VIEW ADDITION TO THE CITY OF SHAWNEE, POTTAWATOMIE COUNTY, OKLAHOMA, ACCORDING TO THE RECORDED PLAT

THEREOF FROM ZONING CLASSIFICATION R-1 (LOW DENSITY RESIDENTIAL DISTRICT) TO C-2 (REGIONAL COMMERCIAL DISTRICT), AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF SHAWNEE ACCORDINGLY.

Motion carried 6-0-0.

AYE: Matthews, Richter, Madson, Stephens, Fichtner, Sehorn

NAY: None

ABSTAIN: None

Ordinance No. 2815NS was adopted by the City Commission.

18. Public Hearing of a request for a Conditional Use Permit for a Short Term Rental located at 40 Chickasaw Drive.

Case No. CUP05-24 | Applicant: Edward King

Community Development Director Rian Harkins stated that the subject property is located at 40 Chickasaw Drive. The applicant is requesting a CUP to allow for one (1) short term rental unit on the property. The Planning Commission and Staff recommend approval.

Mayor Stephens declared a public hearing in session to consider a Conditional Use Permit for a Short Term Rental located at 40 Chickasaw Drive. No one spoke for or against said rezoning. The public hearing was closed.

19. Consideration of a Conditional Use Permit for a Short Term Rental located at 40 Chickasaw Drive.

Case No. CUP05-24 | Applicant: Edward King

Community Development Director Rian Harkins stated the Planning Commission and Staff recommend approval with the conditions as follows:

- Acknowledgment by the applicant that the Approval of a Conditional Use Permit (CUP) does not negate or circumvent the other requirements of development as stated in the City Codes, which include the Zoning Code and the adopted Building and Fire Codes.
- Acknowledgment by the applicant that additional permits may be required and standard inspections will be conducted.
- Adherence to Section 22-199(i) of Shawnee's Unified Development Code.

A motion was made by Vice Mayor Matthews, seconded by Commissioner Sehorn, to approve a Conditional Use Permit for a Short Term Rental located at 40 Chickasaw Drive per Staff's recommendation. Motion carried 6-0-0.

AYE: Matthews, Sehorn, Richter, Madson, Stephens, Fichtner

NAY: None

ABSTAIN: None

20. Consider Bid(s):

a. Lowe's Water Line Loop Replacement (Award)

Public Works Director Brad Schmidt announced that four (4) bids were received. Staff recommends awarding the base bid to Davenport Construction, Edmond, Oklahoma, for the total amount of Five Hundred Forty-Nine Thousand Seventeen Dollars (\$549,017.00).

A motion was made by Commissioner Madson, seconded by Commissioner Fichtner, to award the Lowe's Water Line Loop Replacement bid to Davenport Construction in the amount of Five Hundred Forty-Nine Thousand Seventeen Dollars (\$549,017.00). Motion carried 6-0-0.

AYE: Madson, Fichtner, Sehorn, Richter, Matthews Stephens

NAY: None

ABSTAIN: None

b. Hayes Street Waterline Replacement (Award)

Public Works Director Brad Schmidt announced that three (3) bids were received. Staff recommends awarding the base bid to B&H Construction, LLC, Norman, Oklahoma, for the total amount of Four Hundred Fifty Thousand One Hundred Ninety-Two Dollars (\$450,192.00).

A motion was made by Commissioner Sehorn, seconded by Commissioner Richter, to award the Hayes Street Waterline Replacement bid to B&H Construction, LLC in the amount of Four Hundred Fifty Thousand One Hundred Ninety-Two Dollars (\$450,192.00). Motion carried 6-0-0.

AYE: Sehorn, Richter, Matthews, Madson, Stephens, Fichtner

NAY: None

ABSTAIN: None

c. Public Works Maintenance Facility - Storm Repairs (Award)

Public Works Director Brad Schmidt announced that four (4) bids were received. Staff recommends awarding the Public Works Maintenance Facility - Storm Repairs bid to Midtown Construction Services, Edmond, Oklahoma, for the total amount of One Hundred Twenty-Six Thousand Three Hundred Ninety-Two Dollars (\$126,392.00).

A motion was made by Vice Mayor Matthews, seconded by Commissioner Fichtner, to award the Public Works Maintenance Facility - Storm Repairs bid to Midtown Construction Services in the amount of One Hundred Twenty-Six Thousand Three Hundred Ninety-Two Dollars (\$126,392.00). Motion carried 6-0-0.

AYE: Matthews, Fichtner, Sehorn, Richter, Madson, Stephens

NAY: None

ABSTAIN: None

21. Acknowledge Monthly Sales Tax and Budget Reports.

Finance Director Kimberly Smith reported sales tax collections are up Two Hundred Seventy-Five Thousand Three Hundred Eighty Dollars (\$275,380.00) or One Point Seven Nine Percent (1.79%), over the projected budget year-to-date. She stated that use tax collections are down One Hundred Forty-Nine Thousand Three Hundred Eighty-Seven Dollars (\$149,387.00) or Six Point Two Eight Percent (6.28%), below the projected budget year-to-date.

22. Administrative Report(s):

a. Per- and Poly-Fluoroalkyl Substances (PFAS) Update - Joe Vorndran, City Attorney

City Attorney Joe Vorndran provided presentation on the Per- and Poly-Fluoroalkyl Substances (PFAS) update. Topics discussed included:

- Per- and Poly-Fluoroalkyl Substances - PFAS
- Multi-District Litigation
- PFAS Testing and Results
- Litigation Outlook

23. New Business (Any matter not known or which could not have been reasonably foreseen prior to the posting of the agenda.)

There was no new business.

24. Commissioners Comments

Vice Mayor Matthews commented on the service Mike Warwick provided to the community and thanked police, fire, and first responders.

Commissioner Madson commented on her commitment to her Ward and her intention to fully represent the City as a whole.

Commissioner Fichtner commented on the attendance by the school superintendents and the importance of education.

Commissioner Sehorn commented on sales tax.

Commissioner Richter commented on the importance of education.

Mayor Stephens thanked all who attended the meeting.

RECESS CITY COMMISSION MEETING BY THE POWER OF THE CHAIR
TO CONVENE SHAWNEE AIRPORT AUTHORITY AND SHAWNEE
MUNICIPAL AUTHORITY (8:17 P.M.)

RECONVENE CITY COMMISSION MEETING BY THE POWER OF THE
CHAIR (8:50 P.M.)

25. Discussion and consideration of entering into executive session, as allowed under 25 O.S. § 307 (B) (4) to discuss confidential information between City Council, City Attorney and attorneys from Fulmer Sill concerning litigation against social media companies related to mental health, addiction and societal harms on behalf of the City of Shawnee and, under advice of City Attorney, disclosure will seriously impair the ability of the City of Shawnee to conduct litigation in the public interest.

A motion was made by Commissioner Fichtner, seconded by Mayor Stephens, to approve entering into executive session, as allowed under 25 O.S. § 307 (B) (4) to discuss confidential information between City Council, City Attorney and attorneys from Fulmer Sill concerning litigation against social media companies

related to mental health, addiction and societal harms on behalf of the City of Shawnee and, under advice of City Attorney, disclosure will seriously impair the ability of the City of Shawnee to conduct litigation in the public interest. Motion carried 6-0-0.

AYE: Fichtner, Stephens, Sehorn, Richter, Matthews, Madson

NAY: None

ABSTAIN: None

26. Discussion and consideration of entering into executive session, as allowed under 25 O.S. § 307 (B) (4) to discuss confidential information between City Council, City Attorney and attorneys from Fulmer Sill concerning litigation against Pharmacy Benefit Managers related to price fixing schemes of insulin and other medications vital to the community on behalf of the City of Shawnee and, under advice of City Attorney, disclosure will seriously impair the ability of the City of Shawnee to conduct litigation in the public interest.

A motion was made by Commissioner Madson, seconded by Commissioner Fichtner, to approve entering into executive session, as allowed under 25 O.S. § 307 (B) (4) to discuss confidential information between City Council, City Attorney and attorneys from Fulmer Sill concerning litigation against Pharmacy Benefit Managers related to price fixing schemes of insulin and other medications vital to the community on behalf of the City of Shawnee and, under advice of City Attorney, disclosure will seriously impair the ability of the City of Shawnee to conduct litigation in the public interest. Motion carried 6-0-0.

AYE: Madson, Fichtner, Sehorn, Richter, Matthews, Stephens

NAY: None

ABSTAIN: None

COMMISSION ENTERED INTO EXECUTIVE SESSION AT 8:53 P.M. WITH ALL MEMBERS PRESENT.

COMMISSION RECONVENED FROM EXECUTIVE SESSION AT 9:53 P.M. WITH ALL MEMBERS PRESENT.

27. Discussion and consideration to authorize the Mayor to execute the Legal Services Agreement (LSA) and Resolution for the City of Shawnee for representation by Fulmer Sill on behalf of the City of Shawnee in litigation against social media companies.

City Attorney Joe Vorndran stated that for a point of clarification, the resolution agenda item as authorized only lists Attorneys Fulmer Sill. He requested that if a motion is made, it is a motion to approve the Legal Services Agreement (LSA) and Resolution with an amendment by interlineation to include McAfee & Taft.

A motion was made by Commissioner Madson, seconded by Commissioner Fichtner, to authorize the Mayor to execute the Legal Services Agreement (LSA) and Resolution for the City of Shawnee for representation by Fulmer Sill, with an amendment by interlineation to include McAfee & Taft, on behalf of the City of Shawnee in litigation against social media companies.

Resolution No. 6761 was introduced.

A RESOLUTION OF THE CITY OF SHAWNEE, OKLAHOMA TO PROVIDE FOR RETENTION OF ATTORNEYS TO ADDRESS SOCIAL MEDIA COMPANIES RELATED TO MENTAL HEALTH, ADDICTION AND SOCIETAL HARM.

Motion carried 6-0-0.

AYE: Madson, Fichtner, Sehorn, Richter, Matthews, Stephens

NAY: None

ABSTAIN: None

28. Discussion and consideration to authorize the Mayor to execute the Legal Services Agreement (LSA) and Resolution for the City of Shawnee for representation by Fulmer Sill on behalf of the City of Shawnee in litigation against Pharmacy Benefit Managers.

A motion was made by Vice Mayor Matthews, seconded by Mayor Stephens, to authorize the Mayor to execute the Legal Services Agreement (LSA) and Resolution for the City of Shawnee for representation by Fulmer Sill, with an amendment by interlineation to include McAfee & Taft, on behalf of the City of Shawnee in litigation against Pharmacy Benefit Managers.

Resolution No. 6762 was introduced.

A RESOLUTION OF THE CITY OF SHAWNEE, OKLAHOMA TO PROVIDE FOR RETENTION OF ATTORNEYS TO ADDRESS PHARMACY BENEFIT MANAGERS RELATED TO INSULIN AND OTHER MEDICATIONS.

Motion carried 6-0-0.

AYE: Matthews, Stephens, Fichtner, Sehorn, Richter, Madson

NAY: None

ABSTAIN: None

29. Adjournment

There being no further business to be considered, the meeting was adjourned by power of the Chair. (9:57 p.m.)

ERIC STEPHENS, MAYOR

ATTEST:

LISA LASYONE, MMC
CITY CLERK

**SHAWNEE BEAUTIFICATION, PARKS, AND RECREATION COMMITTEE
PROCEEDINGS**

NOVEMBER 21, 2024 AT 4:00 PM

The Shawnee Beautification, Parks, and Recreation Committee of the City of Shawnee, County of Pottawatomie, State of Oklahoma, met in Regular Session in the Commission Chambers at City Hall, 16 West 9th Street, Shawnee, Oklahoma on, November 21, 2024 at 4:00 P.M. pursuant to notice duly posted as prescribed by law at 3:28 P.M. on November 19, 2024. Commissioner Richter presided and called the meeting to order. Upon roll call, the following members were in attendance.

Absent
Chairperson

Absent
Vice Chairperson

Raymond Lutomski Jr.
Committee Member

Kerri Keck
Committee Member

Sue Nelson
Committee Member

Vickie Winters
Committee Member

Lauren Richter
Commissioner/Committee Member

ABSENT: Chad Payn and Sherry Lankford

CALL TO ORDER

DECLARATION OF QUORUM

1. Swearing in of Raymond Lutomski Jr. as a Committee Member.

Mr. Lutomski was sworn in as a committee member.

2. Consideration of approval of the Minutes from the September 19, 2024 regular meeting.

A motion to approve the September 19, 2024 minutes was made by Kerri Keck. A 2nd was made by Vickie Winters. Motion carried 5-0.

Aye: Sue Nelson, Kerri Keck, Raymond Lutomski, Vickie Winters, and Lauren Richter.

Nay: None

3. Staff Reports

1. The 2nd annual Senior Thangsgiving meal was held at the Senior Recreation Center feeding 94 seniors and staff.
2. Department is actively hiring for parks maintenance, cemetery maintenance,

and rec aides

4. Discussion of Tree Grant

Staff will be meeting with the US Forestry Service on December 4, 2024 for 1st site visit. We will be discussing in more detail the guidelines of the grant and will have more to tell the committee after the meeting. The grant will pay for 1 staff member to become a certified arborist.

5. Citizens Participation

(A three-minute limit per person)

(A twelve-minute limit per topic)

Mr. Morris, Mr. Crawford, and Ms. Berger spoke during citizens participation.

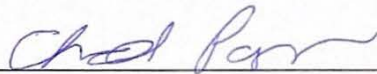
6. Committee Comments

1. The committee discussed the need to get community input on how to rebuild Lions Club Park.

2. The committee expressed excitement regarding the Avedis Grant funds for the new splash pads at Boy Scout Park and Optimist Park.

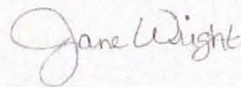
7. Adjournment

The meeting was adjourned at 4:53 P.M.



CHAD PAYN
CHAIRPERSON

ATTEST:



JANE WRIGHT
SECRETARY



Entity Payment Report

12/01/2024 - 12/31/2024

Payment Date	Name	Payment Type	Receipt #	Payment Amount
12/31/2024	HUBBARD PLUMBING LLC	IBX CC	3991	75.00
12/30/2024	OASIS LAWN CARE SYSTEMS LLC	Check	3988	25.00
12/30/2024	JOHN BRACKLEIN	Check	3987	808.00
12/30/2024	JOHNSON CONSTRUCTION	Check	3986	75.00
12/30/2024	MARY BORUM	Check	3985	15.00
12/30/2024	BLUE CURRENT ELECTRIC	Cash	3984	100.00
12/30/2024	BARBARA COCHRANE & PAMELA GRIFFIN	Check	3983	808.00
12/30/2024	JAMES W ISBELL	Cash	3982	6.00
12/30/2024	A-TEAM HEATING COOLING	IBX CC	3989	75.00
12/30/2024	SIGNS & WONDERS, LLC	IBX CC	3990	75.00
12/27/2024	LINK HAUS JEWELRY	IBX CC	3981	50.00
12/26/2024	JAMES CRAWFORD ELECTRIC LLC	Check	3977	75.00
12/26/2024	WADE SERVICES	IBX CC	3980	75.00
12/26/2024	BLASRE CAPITAL INC dba LUCKINBILL MECHANICAL, INC	IBX CC	3978	75.00
12/26/2024	BLASRE CAPITAL INC dba LUCKINBILL MECHANICAL, INC	IBX CC	3979	75.00
12/23/2024	CASEY &	Check	3975	15.00

	THERESA KING			
12/23/2024	BRICKHOUSE CANNABIS CO	Cash	3974	1,500.00
12/23/2024	WAGGONER'S HEAT & AIR	IBX CC	3976	75.00
12/20/2024	COMFORTWORKS INC	Check	3973	75.00
12/20/2024	AKC PLUMBING, LLC	IBX CC	3970	75.00
12/20/2024	KELVIN ELECTRIC	IBX CC	3971	75.00
12/20/2024	LUCY & FRED'S UNLIMITED PLUMBING	IBX CC	3972	75.00
12/19/2024	JOHN & JASON HAYS	Check	3969	808.00
12/19/2024	QUALITY LAWN & TURF CONTROL	Check	3968	25.00
12/19/2024	SUTTON RYAN PETZ IRREVOCABLE TRUST	Check	3967	792.00
12/19/2024	FARMERS ELECTRIC	Check	3966	75.00
12/19/2024	STORM SAFE INGROUND SHELTERS	Check	3964	75.00
12/19/2024	IRWIN SEPTIC LLC	IBX CC	3963	75.00
12/19/2024	SHAWVER & SON INC	IBX CC	3965	75.00
12/18/2024	CND PLUMBING	IBX CC	3961	100.00
12/18/2024	SHANG FOOT SPA LLC	IBX CC	3962	50.00
12/17/2024	RETHFORD ELECTRIC	Check	3960	75.00
12/17/2024	EZPAWN 30107	Check	3959	25.00
12/17/2024	MACKLIN MECHANICAL	IBX CC	3957	100.00
12/17/2024	405 - VOLTAGE	IBX CC	3958	100.00
12/16/2024	JAMES W ISBELL	Cash	3956	15.00
12/16/2024	ELLIOT SHULER & GRETA MADSON	Cash	3955	792.00

12/16/2024	ABSOLUTE PROFESSIONAL STAFFING	Cash	3953	50.00
12/16/2024	MIDWEST WRECKING	Check	3950	75.00
12/16/2024	HI-TECH PLUMBING OF OK	IBX CC	3952	100.00
12/16/2024	SPENCER ELECTRIC	IBX CC	3954	75.00
12/16/2024	RAINBOW HEAT AND AIR INC	IBX CC	3951	75.00
12/13/2024	TRINITY ELECTRICAL CONTRACTING CO INC	IBX CC	3947	100.00
12/13/2024	Cornerstone Wiring & Electrical Services	IBX CC	3948	100.00
12/13/2024	AARON'S PLUMBING	IBX CC	3949	100.00
12/12/2024	TRUGREEN-CHEMLAWN	Check	3945	25.00
12/12/2024	TOP TIER	IBX CC	3946	100.00
12/11/2024	GREGGS CLIMATE CONTROL	Check	3943	75.00
12/11/2024	MERAKI SALON	Cash	3942	50.00
12/11/2024	DINO WEED CONTROL LLC	Check	3940	25.00
12/11/2024	APRIL HILL	Check	3939	792.00
12/11/2024	ELMER & BRENDA LUCAS	Check	3938	792.00
12/11/2024	G&S SIGN SERVICES	Check	3937	75.00
12/11/2024	NAUTICAL MECHANICAL	IBX CC	3941	75.00
12/11/2024	ACOCK CLIMATE CONTROL	IBX CC	3944	100.00
12/10/2024	BETTE BENTON C/O ELBERT J BENTON, JR	Check	3936	792.00
12/10/2024	TOM HENNIGH	Cash	3935	15.00
12/10/2024	BONRAY REAL ESTATE, LLC	Check	3934	15.00
12/9/2024	AIRCO SERVICE INC	Check	3930	100.00

12/9/2024	SANDRA HOWARD & CAMERON BENTLEY	Check	3929	792.00
12/9/2024	WD RANCH SERVICES	Check	3928	75.00
12/9/2024	DON SCHIMMELS ELECTRIC, INC	Check	3927	75.00
12/9/2024	MICHAEL DENNIS BALDUFF & MICHELE JEANETTE BALDUFF	Check	3926	792.00
12/9/2024	MARK LANG	Check	3922	25.00
12/9/2024	WEST SHORE HOME LLC	IBX CC	3924	75.00
12/9/2024	GSS SIGN & DESIGN dba GLOBAL SIGN SOLUTIONS	IBX CC	3925	75.00
12/9/2024	DURHAM SUPPLY	IBX CC	3923	100.00
12/9/2024	OKLAHOMA STEAK BISTRO	IBX CC	3931	50.00
12/9/2024	FUME TATTOO STUDIO	IBX CC	3932	50.00
12/9/2024	T & S ELECTRICAL SERVICES LLC	IBX CC	3933	75.00
12/6/2024	LAKESHORE LODGE	Check	3921	792.00
12/6/2024	CECILIA ENGEL & BENJAMIN D'AMICO	Check	3920	792.00
12/6/2024	BIGGS BACKHOE INC	Check	3919	75.00
12/5/2024	AIR FORCE 1 A/C & HTG, LLC	Check	3916	75.00
12/5/2024	CANDACE COLLIE	Check	3915	792.00
12/5/2024	CRYSTAL MARFIL	Check	3914	25.00
12/5/2024	SIGN WORKS	Check	3913	75.00
12/5/2024	GARY'S ELECTRIC SERVICE	IBX CC	3918	75.00
12/5/2024	A & T MECHANICAL HEAT & AIR SERVICES	IBX CC	3917	100.00

12/4/2024	FIRESTORM SEPTICS AND SHLETERS	Check	3909	75.00
12/4/2024	FIRESTORM SEPTICS AND SHELTERS	Check	3908	75.00
12/4/2024	ABSOLUTE ELECTRICAL CONTRACTORS, LLC	IBX CC	3910	75.00
12/4/2024	A.S.A.P. HEATING AND AIR INC	IBX CC	3912	75.00
12/4/2024	POWERHOUSE RETAIL SERVICES LLC	IBX CC	3911	100.00
12/4/2024	HARRIS SERVICES LLC	IBX CC	3907	75.00
12/3/2024	DAVID & JOY GRIFFIN	Cash	3905	792.00
12/3/2024	J&J DOZER SERVICE INC	Check	3904	75.00
12/3/2024	PLATINUM PLUMBING	IBX CC	3906	75.00
12/2/2024	ADMINISTRATIVE CONSULTANT SERVICE	Check	3903	50.00
12/2/2024	COLE PLUMBING	Check	3901	75.00
12/2/2024	PAT TILLERY CONSTRUCTION	Check	3898	75.00
12/2/2024	ROTO-ROOTER	Check	3897	75.00
12/2/2024	M & J CONTRACTORS LLC	Check	3896	75.00
12/2/2024	OKLAHOMA SHELTERS	Check	3895	75.00
12/2/2024	CDL ELECTRIC COMPANY, INC	Check	3894	75.00
12/2/2024	DR BRIAN DREW, DDS PC	Check	3893	15.00
12/2/2024	PATRICK'S ELECTRIC	Check	3892	75.00
12/2/2024	PATRICK'S ELECTRIC	Check	3891	75.00
12/2/2024	DIANNA JONES OR RUSSELL B JONES	Check	3889	792.00

12/2/2024	JOHNSON ELECTRIC	IBX CC	3902	75.00
12/2/2024	NEAL'S LAWN SERVICE LANDSCAPING LLC	IBX CC	3900	75.00
12/2/2024	NEAL'S LAWN SERVICE LANDSCAPING LLC	IBX CC	3899	25.00
12/2/2024	DAVID THOMPSON PLUMBING	IBX CC	3890	75.00
				19,299.00

Total Records: 103

1/9/2025



Monthly - City Clerk

12/01/2024 - 12/31/2024

Permit #	Permit Date	Permit Type	Parcel Address	Applicant Name	Description	Project Cost	Square Feet	Total Fees
20241889	12/31/2024	E - Electrical	4204 N POTTENGER AVE	GENERATOR SUPERCENTER	generator	0	0	
20241888	12/31/2024	M - Mechanical	1806 REMINGTON CIR	AIR COMFORT SOLUTIONS		0	0	
20241887	12/31/2024	P - Plumbing	3 POST OFFICE NECK	HUBBARD PLUMBING	GENERATOR	0	0	\$54.50
20241886	12/31/2024	B - Residential - Remodel	1501 N BROADWAY	COPPER CREEK VALLEY SERIES LLC	REMODEL	80,000	1,180	\$255.25
20241885	12/30/2024	M - Mechanical	1400 N CENTER AVE	A-TEAM HTG&COOLING	BATH VENTS	0	0	
20241884	12/30/2024	O - Sign	4621 N KICKAPOO AVE	DALMARC SIGNS	REPLACE EXISTING - QDOBA	2,700	31	
20241883	12/30/2024	E - Electrical	523 N PATCHIN	BLUE CURRENT ELECTRIC	SERVICE UPGRADE	0	0	\$54.50
20241882	12/30/2024	B - Roof Redeck	301 N Market Ave	WHITE ROOFING	ROOF REDECK	0	0	\$54.50
20241881	12/30/2024	E - Electrical	321 W FARRALL	405 - VOLTAGE	BCW	0	0	\$54.50

20241880	12/30/2024	B - Swimming Pool	4618 CHURCHILL	ROCK CREEK POOLS LLC	NEW INSTALLATION	62,500	420	\$64.50
20241879	12/26/2024	E - Electrical	120 1/2 W DEWEY	ALL PHASE ELECTRIC, INC	MISCELLANEOUS	0	0	\$54.50
20241878	12/26/2024	P - Plumbing	3 W MACARTHUR	HARDIN'S FAMILY PLUMBING	METER RESET	0	0	\$54.50
20241877	12/26/2024	M - Mechanical	21 CONCORD	WATKINS HEATING & AIR CONDITIONING	CHANGE OUT	0	0	\$54.50
20241876	12/23/2024	F - Burn	1720 WILDWOOD	TODD JANDA	BURN PERMIT	0	0	\$29.50
20241875	12/23/2024	E - Electrical	411 W HIGHLAND ST	KB ELECTRIC, LLC	MISCELLANEOUS	0	0	\$54.50
20241874	12/20/2024	P - Plumbing	14106 ACME RD STE E	CASTILLO AND SONS	REMODEL	0	0	\$54.50
20241873	12/19/2024	E - Electrical	3901 N KICKAPOO #29	SELECT SERVICE ELECTRIC	BCW	0	0	\$54.50
20241872	12/19/2024	E - Electrical	3901 N KICKAPOO #36	SELECT SERVICE ELECTRIC	BCW	0	0	\$54.50
20241871	12/19/2024	E - Electrical	1400 N CENTER AVE	GROVE ELECTRICAL SOLUTIONS	REMODEL	0	0	
20241870	12/19/2024	B - Commercial - Remodel	700 N TUCKER AVE	JAMESON HAN	RE-PERMIT	150,000	3,223	\$810.25
20241869	12/19/2024	P - Plumbing	12 MOJAVE DR	COLE PLUMBING	REMODEL	0	0	\$104.50
20241868	12/18/2024	B - Residential - New	115 W GEORGIA	ABNER MONTERROSO	NEW CONSTRUCTION	200,000	2,085	\$1,172.56
20241867	12/18/2024	O - Sian	3800 N	RATTIKOOL	MONUMENT	1.800	36	\$50.00

			MARKET AVE	PRINT COMPANY	SIGN			
20241866	12/18/2024	P - Plumbing	1400 N CENTER AVE	CND PLUMBING LLC	NEW PLUMBING	0	0	\$54.50
20241864	12/18/2024	E - Electrical	321 W FARRALL	405 - VOLTAGE	NEW SERVICE	0	0	\$54.50
20241863	12/18/2024	B - Commercial - New	GARRETTS LAKE RD	ACE ELECTRICAL CONTRACTORS, INC	NEW CONSTRUCTION	161,324	432	\$212.50
20241862	12/18/2024	B - Residential - Remodel	516 N MARKET	CHARLES SWADLEY	REMODEL	60,000	1,044	\$226.35
20241861	12/17/2024	O - Sign	130 E 45TH ST	GATEWAY GRAPHICS LLC	NEW INSTALLATION	25,500	36	
20241860	12/17/2024	B - Residential - Remodel	3901 N KICKAPOO #36	MISTY MADER	REMODEL	27,500	1,200	\$259.50
20241859	12/17/2024	M - Mechanical	1001 E MACARTHUR	A TEAM HTG AND COOLING	DUCT WORK	0	0	\$54.50
20241858	12/17/2024	E - Electrical	724 N LOUISA	ACOCK CLIMATE CONTROL	REPLACE EXISTIN	0	0	\$54.50
20241857	12/17/2024	P - Plumbing	613 N ROOSEVELT	QUALITY PLUMBING	GAS TEST	0	0	\$54.50
20241856	12/17/2024	B - Residential - Remodel	3901 N KICKAPOO #30	MISTY MADER	RE-BRICK	27,500	1,200	\$259.50
20241855	12/17/2024	B - Residential - Remodel	3901 N KICKAPOO #29	MISTY MADER	REMODEL	27,500	1,200	\$259.50
20241854	12/17/2024	E - Electrical	1831 N AIRPORT RD	SHAWVER & SON	REMODEL	0	0	\$54.50
20241853	12/16/2024	P - Plumbing	505 POOL PLACE	COWBOYS PLUMBING LLC	NEW INSTALLATION	0	0	\$54.50

20241852	12/16/2024	P - Plumbing	14106 ACME RD STE D	CASTILLO AND SON	REMODEL	0	0	\$54.50
20241851	12/16/2024	E - Electrical	536 N POTTENGER AVE	SPENCER ELECTRIC	200AMP SERVICE / BCW	0	0	\$104.50
20241850	12/16/2024	P - Plumbing	28 N GILPIN AVE	HI-TECH PLUMBING	NEW INSTALLATION	0	0	\$54.50
20241849	12/16/2024	M - Mechanical	3406 N MARKET AVE	WATKINS HEATING & AIR CONDITIONING	CHANGE OUT	0	0	\$54.50
20241848	12/16/2024	M - Mechanical	4301 N UNION	WATKINS HEATING & AIR CONDITIONING	CHANGE OUT	0	0	\$54.50
20241847	12/16/2024	E - Electrical	678 KICKAPOO SPUR	LINE ELECTRIC AND LIGHTING	NEW SERVICE 200AMP	0	0	\$54.50
20241846	12/16/2024	P - Plumbing	1920 N BROADWAY AVE	STANFIELD PLUMBING	POOL APPLIANCES	0	0	\$54.50
20241845	12/16/2024	E - Electrical	17 COMANCHE DR	SHINE SOLAR LLC	NEW INSTALLATION	27,968	315	\$54.50
20241844	12/16/2024	B - Solar Panels	17 COMANCHE DR	SHINE SOLAR LLC	NEW INSTALLATION	27,968	315	\$71.44
20241843	12/16/2024	M - Mechanical	615 N DOROTHY AVE	TPC HEAT AND AIR	NEW INSTALLATION	0	0	\$54.50
20241842	12/16/2024	E - Electrical	2512 N HARRISON AVE	TRINITY ELECTRICAL CONTRACTING CO INC	NEW INSTALLATION	0	0	\$54.50
20241841	12/13/2024	P - Plumbing	1826 N UNION AVE	DALE'S PLUMBING	MISCELLANEOUS	0	0	\$54.50
20241840	12/13/2024	P - Plumbing	2009 N	AARON'S	GAS LINE	0	0	\$54.50

			HARRISON	PLUMBING	EXTENSION - NEW HVAC UNIT			
20241839	12/13/2024	E - Electrical	1227 E 11TH	CORNERSTONE WIRING & ELECTRICAL SERVICE	RESET	0	0	\$54.50
20241838	12/12/2024	B - Residential - New	1201 PALMER	RICK LANDES HOMES	NEW CONSTRUCTION	150,000	700	
20241837	12/12/2024	B - Residential - Remodel	529 N DOROTHY #B	TRACY DAVIS	REMODEL	0	0	
20241836	12/12/2024	F - Burn	33904 LAKE RD	BOBBY HOLMES	BURN PERMIT	0	0	\$29.50
20241835	12/12/2024	B - Commercial - New	6 E MACARTHUR ST	GREG CULLISON	NEW CONSTRUCTION	976,000	3,464	\$1,295.50
20241834	12/12/2024	P - Plumbing	1615 N HARRISON	RED PLAINS PLUMBING	YARD REPLACEMENT	0	0	\$54.50
20241833	12/12/2024	M - Mechanical	910 N SHAWNEE ST	WAGGONERS HEAT AND AIR	APT 12	0	0	\$54.50
20241832	12/12/2024	B - Residential - Remodel	216 S MINNESOTA	JOHN SMITH	ALTERATION	0	0	
20241831	12/12/2024	B - Residential - Remodel	514 S PARK AVE	JOHN SMITH	ALTERATION	0	0	
20241830	12/11/2024	M - Mechanical	1831 N AIRPORT RD	INTEGRATED HVAC	MISCELLANEOUS	0	0	\$54.50
20241829	12/11/2024	E - Electrical	14106 ACME RD STE E	TIMOTHY ROBERTS	REMODEL	0	0	\$54.50
20241828	12/11/2024	M - Mechanical	14106 ACME RD STE E	TIMOTHY ROBERTS	REMODEL	0	0	\$54.50
20241827	12/11/2024	E - Electrical	14106 ACME RD STE D	TIMOTHY ROBERTS	REMODEL	0	0	\$54.50

20241826	12/11/2024	M - Mechanical	14106 ACME RD STE D	TIMOTHY ROBERTS	REMODEL	0	0	\$54.50
20241825	12/11/2024	M - Mechanical	712 N HOBSON	TIMOTHY ROBERTS	REMODEL	0	0	\$54.50
20241824	12/11/2024	P - Septic	15403 PERRY RD	FIRESTORM SEPTICS AND SHELTERS	NEW INSTALLATION	0	0	\$25.00
20241823	12/11/2024	P - Plumbing	4002 N CHAPMAN	AIRCO SERVICE	CHANGE OUT	0	0	\$54.50
20241822	12/11/2024	M - Mechanical	607 W WOOD	GREGGS CLIMATE CONTROL	NEW INSTALLATION	0	0	\$54.50
20241821	12/11/2024	M - Mechanical	3939 N KICKAPOO SUITE 400	MACKLN MECHANICAL	VENT HOOD	0	0	\$54.50
20241820	12/11/2024	O - Sign	1615 N HARRISON	ENCINOS 3D CUSTOM PRODUCTS	NEW INSTALLATION	5,400	20	\$50.00
20241819	12/11/2024	M - Mechanical	12 MOJAVE DR	ACOCK CLIMATE CONTROL	REMODEL	0	0	\$54.50
20241818	12/10/2024	F - Fire Suppression	3900 N UNION AVE #101	CONTROL FIRE SYSTEMS	NEW INSTALLATION	1,775	6,835	\$241.20
20241817	12/10/2024	F - Fire Suppression	3900 N UNION AVE #1301	CONTROL FIRE SYSTEMS	NEW INSTALLATION	21,600	7,325	\$251.00
20241816	12/10/2024	F - Fire Suppression	3900 N UNION AVE #1401	CONTROL FIRE SYSTEMS	NEW INSTALLATION	21,600	7,325	\$251.00
20241815	12/10/2024	F - Fire Suppression	3900 N UNION AVE #1501	CONTROL FIRE SYSTEMS	NEW INSTALLATION	13,500	4,603	\$196.56

20241814	12/10/2024	B - Swimming Pool	1113 MUIRFIELD	TRIBAL CUSTOM POOLS LLC	POOL PERMIT	120,000	774	\$64.50
20241813	12/10/2024	B - Commercial - Remodel	14106 ACME RD STE E	HOME INTEGRATION	REMODEL	18,000	1,500	\$379.50
20241812	12/10/2024	B - Commercial - Remodel	1400 N CENTER AVE	EAGLE VISION CONSTRUCTION	REMODEL	0	950	
20241811	12/10/2024	B - Residential - New	4304 ELOISE DR	J BENTLEY CONSTRUCTION	NEW CONSTRUCTION	200,000	2,127	\$1,301.49
20241810	12/10/2024	B - Residential - Remodel	1339 E HIGHLAND ST	LENNY REAVES	REMODEL	22,000	1,456	\$313.90
20241809	12/10/2024	P - Plumbing		ROWDY BOYS PLUMBING	TIE ON TO CITY WATER	0	0	\$454.50
20241808	12/10/2024	P - Plumbing		ROWDY BOYS PLUMBING	TIE ON TO CITY WATER	0	0	\$454.50
20241807	12/10/2024	F - Firework Display		ARC PYROTECHNICS, INC	FIREWORKS DISPLAY	0	0	
20241806	12/10/2024	F - Hood Suppression System	4832 MARKETPLACE BOULEVARD SUITE 100	ACE FIRE & SAFETY SERVICES	NEW INSTALLATION	0	0	\$104.50
20241805	12/10/2024	B - Residential - New	4302 ELOISE DR	J BENTLEY CONSTRUCTION	NEW CONSTRUCTION	200,000	1,983	\$1,385.89
20241804	12/9/2024	B - Residential - Remodel	202 S DIXON	SHERRAL MCVEA	ABATEMENT	0	1,050	
20241803	12/9/2024	E - Electrical	127 N SHAWNEE	ION DEVELOPER LLC	NEW INSTALLATION	0	0	\$54.50

20241802	12/9/2024	B - Solar Panels	127 N SHAWNEE	ION DEVELOPER LLC	NEW INSTALLATION	3,612	252	\$58.05
20241801	12/9/2024	E - Electrical	3939 N KICKAPOO	JK MORGAN COMPANY	HOUSE METER	0	0	\$54.50
20241800	12/9/2024	B - Residential - Remodel	1934 N BROADWAY AVE	SOURCE MANAGEMENT SERVICES LLC	ROOF REDECK	84,714	4,495	\$54.50
20241799	12/9/2024	PC - Lot Split		Kevin Hanna	Short Form Subdivision (Lot Split)	0	9,100	
20241798	12/9/2024	P - Plumbing	4832 MARKETPLACE BOULEVARD SUITE 100	AKC PLUMBING	WATER, SEWER, GAS INSIDE	0	0	\$54.50
20241797	12/9/2024	B - Accessory Structure	1405 W WALLACE	JOES CONSTRUCTION & RENOVATION LLC	GARGAGE ADD ON	10,000	704	\$154.10
20241796	12/6/2024	O - Paving Cut and Boring	1404 CLAIRE CT	TEXAS STATE UTILITIES	BORE	0	0	
20241795	12/6/2024	O - Paving Cut and Boring	1407 ELLIE CT	TEXAS STATE UTILITIES	BORE	0	0	
20241794	12/6/2024	O - Paving Cut and Boring	1405 ELLIE CT	TEXAS STATE UTILITIES	BORE	0	0	
20241793	12/6/2024	O - Sign	2401 N HARRISON #300	YEARWOOD DESIGN WORKS	24" METAL LETTERS	0	0	\$50.00
20241792	12/6/2024	F - Burn	1718 WILDWOOD	WESLEY FOWLER	BURN PERMIT	0	0	\$29.50
20241791	12/6/2024	B - Commercial - Remodel	196 SHAWNEE MALL DR	JEAROLD ROBINSON	REMODEL	150,000	2,130	\$537.00

20241790	12/6/2024	M - Mechanical	210 W GEORGIA UNIT D	REACT PLUMBING	MINI SPLIT	0	0	\$54.50
20241789	12/6/2024	M - Mechanical	210 W GEORGIA UNIT C	REACT PLUMBING	MINI SPLIT	0	0	\$54.50
20241788	12/6/2024	M - Mechanical	210 W GEORGIA UNIT B	REACT PLUMBING	MINI SPLIT	0	0	\$54.50
20241787	12/6/2024	M - Mechanical	210 W GEORGIA UNIT A	REACT PLUMBING	MINI SPLIT	0	0	\$54.50
20241786	12/6/2024	P - Plumbing	210 W GEORGIA UNIT D	REACT PLUMBING AND HTG	FINAL PLUMBING	0	0	\$54.50
20241785	12/6/2024	P - Plumbing	210 W GEORGIA UNIT C	REACT PLUMBING AND HTG	FINAL PLUMBING	0	0	\$54.50
20241784	12/6/2024	P - Plumbing	210 W GEORGIA UNIT B	REACT PLUMBING AND HTG	FINAL PLUMBING	0	0	\$54.50
20241783	12/6/2024	P - Plumbing	210 W GEORGIA UNIT A	REACT PLUMBING AND HTG	FINAL PLUMBING	0	0	\$54.50
20241782	12/5/2024	M - Mechanical	711 KICKAPOO SPUR	on Demand restaurant service	refrigerant	0	0	\$54.50
20241780	12/5/2024	M - Mechanical	1404 BERKSHIRE PL	A & T MECHANICAL	CHANGE OUT	0	0	\$104.50
20241779	12/5/2024	B - Residential - Multi Family	1205 E 9TH	ACOCK PROPERTIES	NEW CONSTRUCTION	150,000	707	\$734.74
20241778	12/5/2024	E - Electrical	937 N PATCHIN	JOHNSON ELECTRIC LLC	BRANCH CIRCUIT WIRING	0	0	\$54.50

20241777	12/5/2024	B - Residential - Remodel	301 S OKLAHOMA	GUSTAVO PEREZ	REMODEL	60,000	788	\$171.95
20241776	12/5/2024	O - Demolition and Moving	311 N MARKET	TBD	ABATEMENT	0	2,757	\$50.00
20241775	12/5/2024	B - Residential - Remodel	311 N MARKET	TBD	ABATEMENT	0	2,757	\$29.50
20241774	12/4/2024	B - Residential - Remodel	708 E MAIN	DENNIS GLENN	706-710 e main	100,000	1,860	\$29.50
20241773	12/4/2024	M - Mechanical	1420 SHERRY LN	SPARKS HEAT & AIR, INC	CHANGE OUT	0	0	\$54.50
20241772	12/4/2024	B - Commercial - Remodel	4901 N KICKAPOO	TBD	REMODEL	35,000	1,000	\$254.50
20241771	12/4/2024	M - Mechanical	1502 N BEARD AVE	LOVES HVAC	CHANGE OUT	0	0	\$204.50
20241770	12/4/2024	O - Curb Cut, Driveway and Sidewalk	405 W DILL ST	HARRIS SERVICES LLC	DRIVEWAY	0	0	\$50.00
20241769	12/4/2024	O - Demolition and Moving	1830 N BEARD AVE	HARRIS SERVICES LLC	3 BUILDINGS AT BACK OF THE PROPERTY	0	0	\$150.00
20241768	12/4/2024	E - Electrical	519 W UNIVERSITY ST	GROVE ELECTRICAL SOLUTIONS	remove old and replace with new	0	0	\$54.50
20241767	12/3/2024	O - Sign	1102 W MACARTHUR	G&S SIGN SERVICES	NEW INSTALLATION	0	0	\$150.00
20241766	12/3/2024	P - Plumbing	1125 N KICKAPOO	JIMMYS PLUMBING	MISCELLANEOUS	0	0	\$54.50
20241765	12/3/2024	P - Plumbing	1212 N UNION	SALZER PLUMBING	REPLACE EXISTING	0	0	\$54.50
20241764	12/3/2024	B -	8 AMERICAN	INDACO	NEW	1.500.000	30.000	\$7.804.50

		Commercial - New	WAY	METALS	CONSTRUCTION			
20241763	12/3/2024	O - Paving Cut and Boring	1403 ELLIE CT	TEXAS STATE UTILITIES	1205 N OKLAHOMA ST	0	0	
20241762	12/3/2024	O - Paving Cut and Boring	1401 ELLIE CT	TEXAS STATE UTILITIES	1205 N OKLAHOMA ST	0	0	
20241761	12/3/2024	O - Paving Cut and Boring	1402 CLAIRE CT	TEXAS STATE UTILITIES	1205 N OKLAHOMA ST	0	0	
20241760	12/3/2024	O - Paving Cut and Boring	1218 E EDWARDS ST	TEXAS STATE UTILITIES	1205 N OKLAHOMA ST	0	0	
20241759	12/3/2024	P - Plumbing	1218 E EDWARDS ST	DALE'S PLUMBING	MISCELLANEOUS	0	0	\$54.50
20241758	12/3/2024	B - Residential - New	4306 ELOISE DR	J BENTLEY CONSTRUCTION	NEW CONSTRUCTION	200,000	2,265	\$1,455.81
20241757	12/3/2024	B - Residential - Multi Family	1207 E 9TH	ACOCK PROPERTIES	NEW CONSTRUCTION	150,000	707	\$1,134.74
20241756	12/3/2024	P - Plumbing	1202 WINDSOR PL	DALE'S PLUMBING	MISCELLANEOUS	0	0	\$54.50
20241755	12/2/2024	P - Plumbing	5 DELAWARE	COLE PLUMBING	ADD ON	0	0	\$54.50
20241754	12/2/2024	O - Demolition and Moving	1320 N MARKET AVE	NEAL'S LAWN SERVICE LLC	DEMOLITION	0	0	
20241753	12/2/2024	E - Electrical	718 N POTTENGER AVE	GREENERGY RESOURCES LLC	NEW SERVICE 200 AMP	0	0	\$54.50
20241752	12/2/2024	P - Plumbing	1205 N OKLAHOMA	KENNEDY PLUMBING	REPLACE GASLINE	0	0	\$54.50
20241751	12/2/2024	P - Plumbing	1120 W	DALE'S	MISCELLANEOUS	0	0	\$54.50

			WOOD ST	PLUMBING				
20241750	12/2/2024	P - Plumbing	913 E 11TH ST	DALE'S PLUMBING	MISCELLANEOUS	0	0	\$54.50
20241749	12/2/2024	P - Plumbing	4202 N POTTENGER AVE	DALE'S PLUMBING	MISCELLANEOUS	0	0	\$54.50
20241748	12/2/2024	P - Plumbing	926 E INDEPENDCE	DALE'S PLUMBING	MISCELLANEOUS	0	0	\$54.50
								\$27,591.78

Total Records: 140

1/9/2025



Finance Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: Kimberly Smith, Finance Director
Subject: Budget amendments for Fiscal Year 2024 – 2025:

Background: A total budget amendment in the amount of \$35,965.63 across several funds should be considered.

Insurance Recovery - The City of Shawnee received insurance proceeds for a traffic single cabinet at Garrett's Lake Road and Highway 18. The amount for the appropriation is as follows:

- \$28,517.10 - Capital Outlay - Equipment

Police Department Donations - The Police Department received donations from two different recipients. City staff is requesting those donations be appropriated for use in Fiscal Year 2024-2025 for the purpose of materials and supplies. The amount for appropriation is as follows:

- \$6,300.00 - Other Materials & Supplies

Police Department Drug Forfeiture (State) - In past years, the State of Oklahoma has sent to the Police Department proceeds from seized funds. City staff is requesting the transfer of prior year funds to cover the funeral expenses for one of their canines. The amount for the appropriation is as follows:

- \$1,148.53 - K-9 Services & Supplies

Financial Impact: See Budget Amendments

Attachments:

Staff Recommendation: Approval of all items

**CITY OF SHAWNEE
2024-2025 BUDGET AMENDMENT
INSURANCE RECOVERY FUND**

Estimated Revenue, Fund Balance, or Transfers IN

Fund Number	Account Number	Project Code	Line Item	Description	Balance Before Amendment	Amount of Amendment Increase (Decrease)	Balance After Amendment
603	48040			INSURANCE RECOVERY	66,567.70	(28,517.10)	95,084.80
				Total	66,567.70	(28,517.10)	38,050.60

Appropriations

Fund Number	Account Number	Project Code	Line Item	Description	Balance Before Amendment	Amount of Amendment Increase (Decrease)	Balance After Amendment
603	5-0930-54500			CAPITAL OUTLAY - EQUIPMENT	2,745.00	28,517.10	31,262.10
					-	-	-
					2,745.00	28,517.10	31,262.10

Approved by the City Commission this

Explanation of Budget Amendment:

To appropriate insurance proceed received for traffic signal cabinet at Garrett's Lake & Hwy 18.

Approved:

Mayor _____

Attest: _____

City Clerk _____

Posted By _____ Date _____ BA# _____ Pkt.# _____

**CITY OF SHAWNEE
2024-2025 BUDGET AMENDMENT
DONATIONS - POLICE DEPARTMENT**

Estimated Revenue, Fund Balance, or Transfers IN

Fund Number	Account Number	Project Code	Line Item	Description	Balance Before Amendment	Amount of Amendment Increase (Decrease)	Balance After Amendment
706	44200			DONATIONS - POLICE DEPARTMENT	9,600.00	6,300.00	3,300.00
				Total	9,600.00	6,300.00	3,300.00

Appropriations

Fund Number	Account Number	Project Code	Line Item	Description	Balance Before Amendment	Amount of Amendment Increase (Decrease)	Balance After Amendment
001	5-0620-52500			OTHER MATERIALS & SUPPLIES	2,190.36	6,300.00	8,490.36
					-	-	-
					2,190.36	6,300.00	8,490.36

Approved by the City Commission this

Explanation of Budget Amendment:

To appropriate donations received at the Police Department transferred to other materials and supplies for expenditures in FY25.

Approved:

Mayor _____

Attest: _____

City Clerk _____

Posted By _____ Date _____ BA# _____ Pkt.# _____

**CITY OF SHAWNEE
2024-2025 BUDGET AMENDMENT
DRUG FORFEITURE FUND (STATE) - POLICE DEPARTMENT**

Estimated Revenue, Fund Balance, or Transfers IN

Fund Number	Account Number	Project Code	Line Item	Description	Balance Before Amendment	Amount of Amendment Increase (Decrease)	Balance After Amendment
							-
				Total	-	-	-

Appropriations

Fund Number	Account Number	Project Code	Line Item	Description	Balance Before Amendment	Amount of Amendment Increase (Decrease)	Balance After Amendment
113	5-0620-53785			K-9 SERVICES & SUPPLIES		1,148.53	1,148.53
					-	-	-
					-	1,148.53	1,148.53

Approved by the City Commission this

Explanation of Budget Amendment:

To appropriate funds received at the Police Department transferred to K-9 services & supplies for expenditures in FY25.

Approved:

Mayor _____

Attest: _____

City Clerk _____

Posted By _____ Date _____ BA# _____ Pkt.# _____



APPLICATION TO SERVE
Boards, Committees, and Commissions

- ☒ Appointment
☐ Reappointment – Partial/First/Second Term

Name: <u>Cyndi Berger</u>	Application Date: <u>7/7/2024</u>
Address: <u>27 E Ayre St, Shawnee OK 74801</u>	Date of Birth: <u>12/06/1987</u>
Mailing Address: <u>Same</u>	
Daytime Phone: <u>405-921-2201</u>	Email: <u>Classichberger405@aol.com</u>
Profession: <u>Human Services / Social work</u>	
Business Name: <u>N/a</u>	
Business Address: <u>N/a</u>	
Business Phone: <u>N/a</u>	Email: <u>N/a</u>

Do you live within the City Limits of the City of Shawnee? Yes No

How many years have you lived in Shawnee? 5 years

Do you currently serve on a City board, committee, or commission? Yes No

If so, please list the board/committee/commission: N/a

Select the Board/Committee/Commission you are interested in serving on: (please check)

Airport Advisory Board Board of Adjustment (Zoning) X Housing Authority Library Board Oklahoma Baptist University Trust Authority Planning Commission X Shawnee Arts and Culture Commission	Shawnee Beautification, Parks, and Recreation Committee X Shawnee Civic and Cultural Development Authority Shawnee Hospital Authority X Shawnee Senior Citizens Advisory Board X Shawnee Urban Renewal Authority Other _____
---	---

Why are you interested in serving on the Board/Committee/Commission selected above?

I believe I can provide a unique and new perspective to continue to improve Shawnee and everything it has to offer.
I am an excellent communicator and great at making connections towards ppl building partnerships.

Revised August 1, 2023

What will make you a good board member and what skills or knowledge do you have that would be relevant to this board/committee/commission?

I have experience in working with people of vastly different socioeconomic backgrounds. I have excellent communication skills and knowledge and ability to bring very different people and ideas together.

What civic or volunteer activities (if any) are you currently involved in?

None

List education, including degree(s) earned:

Bachelor's Degree in Political Science

Have you ever served on a City-appointed board/committee/commission before? No

If so, which ones and for how long did you serve?

N/a

Have you ever been charged and/or convicted of a felony? No

If so, please explain the circumstances and the current status of the charge(s) and/or conviction(s):

N/a

Have you ever declared personal or business bankruptcy? No

If so, please explain:

N/a

Please include up to three personal or professional references:

Name	Relationship	Telephone Number
Shanna Wood	Work - Supervisor	580-421-7910
Kristin Green	Friend / Coworker	405-777-1788
Ursula Hudson	Friend	405-708-9647

PLEASE READ CAREFULLY:

Appointment by the Commission is for one term and individuals may not serve more than two consecutive full terms. Appointment to a second term remains at the discretion of the City Commission.

My signature affirms that all information contained herein is true to the best of my knowledge, and that I understand that any misstatement of fact or misrepresentation of credentials may result in disqualification from further consideration.

Signature 

Date 7/7/2024

Applications are retained on file for one (1) year. Applicants are encouraged to include a letter of interest with this application. Thank you for your interest in serving Shawnee.

Send completed application to:

City of Shawnee, Attn: City Clerk, PO Box 1448, Shawnee, OK 74802 or CityClerk@shawneek.org

Revised August 1, 2023



APPLICATION TO SERVE
Boards, Committees and Commissions

- ☐ Appointment
☐ Reappointment – Partial/First/Second Term

Name: <u>Sydney Davidson</u>	Application Date: <u>8/25/2023</u>
Address: <u>131 East Elizabeth Street</u>	Date of Birth: <u>9/23/1982</u>
Mailing Address: <u>131 E. Elizabeth St Shawnee, OK 74804</u>	
Daytime Phone: <u>405-206-4815</u> Fax: _____	Email: <u>sydnie.davidson@okbu.edu</u>
Profession: <u>Executive Assistant to the President</u>	
Business Name: <u>Oklahoma Baptist University</u>	
Business Address: <u>500 W. University Shawnee, OK 74804</u>	
Business Phone: <u>405-585-5801</u> Fax: _____	Email: <u>sydnie.davidson@okbu.edu</u>

Do you live within the City Limits of the City of Shawnee? Yes ☒ No ☐

Do you currently serve on a City board, committee, or commission? Yes ☐ No ☒

If so, please list the board/committee: _____

How many years have you lived in Shawnee? 5

Select the Board/Committee/Commission you are interested in serving on: (please check)

☐ Airport Advisory Board	☐ Library Board
☐ Arts and Culture Commission	☐ Oklahoma Baptist University Trust Authority
☐ Beautification, Parks, and Recreation Committee	☐ Planning Commission
☐ Board of Adjustment (Zoning)	☐ Senior Citizens of Shawnee Board
☐ Civic and Cultural Development Authority	☐ Shawnee Hospital Authority
☐ Community Service Contract Review Committee	☒ Shawnee Urban Renewal Authority
☐ Housing Authority	☐ Other _____

Revised April 25, 2022

Why are you interested in serving on the Board/Committee/Commission selected above?

I want to serve Shawnee where I am needed. I love Shawnee and want to make it a better place.

What will make you a good board member and what skills or knowledge do you have that would be relevant to this board/committee/commission?

I have a masters degree in oil and gas law and worked for the Corporation Commission for 10 years. I am familiar with ordinances and laws and know how to read legal documents

What civic or volunteer activities (if any) are you currently involved in?

I am on the Shawnee Middle School Health and Safety Committee - recently appointed.

I serve at Frontline Church and volunteer for extra activities at OBU.

List education, including degree(s) earned:

Bachelor of Science - University of Central Oklahoma, 2005

Master of Legal Studies in Oil, Gas, and Energy Law - University of Oklahoma School of Law, 2019

Have you ever served on a City-appointed board/committee/commission before? If so, which ones and for how long did you serve?

No.

Have you ever been charged and/or convicted of a felony? No.

If so, please explain the circumstances and the current status of the charge(s) and/or conviction(s):

Have you ever declared personal or business bankruptcy? No.

If so, please explain:

Please include up to three personal or professional references:

Name	Relationship	Telephone Number
Dr.HeathThomas	Boss	919-830-9890
Katelyn Miears	Friend	316-558-1331
Erica Bass	Friend	303-918-1720

PLEASE READ CAREFULLY:

Appointment by the Commission is for one term and individuals may not serve more than two consecutive full terms. Appointment to a second term remains at the discretion of the City Commission.

My signature affirms that all information contained herein is true to the best of my knowledge, and that I understand that any misstatement of fact or misrepresentation of credentials may result in disqualification from further consideration.

Signature

Sydney Davidson

Date

8/25/23

Revised April 25, 2022

From: [Kacie Eck](#)
To: [Kacie Eck](#)
Subject: FW: [EXTERNAL EMAIL]FW: Reappointed
Date: Tuesday, January 14, 2025 8:37:30 AM
Attachments: [Sydnie Davidson - SURA 09-2023.pdf](#)

From: Sydnie Davidson
Sent: Thursday, September 19, 2024 11:38 AM
To: COS City Clerk
Cc: Breanna Wallace
Subject: [EXTERNAL EMAIL]FW: Reappointed

"CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe."

I would like to request a reappointment to the SURA board.

Thanks!

Sydnie Davidson



Public Works Department
111 S. Kickapoo St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: Brad Schmidt, Public Works Director
Subject: Approval of the purchase of a traffic control service truck utilizing state bid pricing for the Public Works Department.

Background: In compliance with the City of Shawnee's Fiscal Year 2025 through 2029 Capital Improvement Plan (CIP), the Traffic Division of the Public Works Department is scheduled to receive a replacement for its service truck.

The proposed truck purchase through the state bid process would replace the current older vehicle, thereby reducing out-of-service time for repairs and improving reliability of City services.

Financial Impact: \$51,987.60; Project 24-0930-04, funded from Capital Improvement Fund, Traffic, Capital Outlay - Equipment, 301-5-0930-54500

Attachments: State Bid Quote

Staff Recommendation: Approval of the item

CONTRACT

State of Oklahoma

Dispatch via Print

Supplier 0000547316
SBC RHC F NORM LP
825 N INTERSTATE DR
NORMAN OK 73069-6350
USA

Contract ID 0000000000000000000000006479		Page 1 of 1	
Contract Dates 06/07/2022 to 02/07/2025	Currency USD	Rate Type CRRNT	Rate Date PO Date
Description: SW0035 Vehicles		Contract Maximum 0.00	
Allow Open Item Reference			
TYPE: STATEWIDE			

Tax Exempt? Y Tax Exempt ID:736017987

Contract Lines:

Line #	Cat CD / Item ID / Item Desc	UOM	Minimum Order		Maximum / Open	
			Qty	Amt	Qty	Amt
1	25101503 / Automobiles or cars See vendor pricing documents for more information.	EA	1.00	0.00	0.00	0.00
	Contract Base Pricing		1.00000			
		EA		0001		
2	25101505 / Vans See vendor pricing documents for more information.	EA	1.00	0.00	0.00	0.00
	Contract Base Pricing		1.00000			
		EA		0001		
3	25101507 / Light trucks or SUVs See vendor pricing documents for more information.	EA	1.00	0.00	0.00	0.00
	Contract Base Pricing		1.00000			
		EA		0001		
4	25101611 / Cargo trucks See vendor pricing documents for more information.	EA	1.00	0.00	0.00	0.00
	Contract Base Pricing		1.00000			
		EA		0001		
5	25101702 / Police vehicles See vendor pricing documents for more information.	EA	1.00	0.00	0.00	0.00
	Contract Base Pricing		1.00000			
		EA		0001		
6	25101921 / Van trucks See vendor pricing documents for more information.	EA	1.00	0.00	0.00	0.00
	Contract Base Pricing		1.00000			
		EA		0001		

COMMENTS:

Vendor Contact:
Scott Womack
405-307-6410
swomack@confidenceford.com
SW0035 Vehicles

Contract Period: 02/08/2023 - 02/07/2025
Agreement Period: 02/08/2021 - 02/07/2026

Final = The price is final after adjustments
Hard = Apply adjustments regardless of other adjustments
Skip = Skip adjustments if any other adjustments have been applied

Authorized Signature

Lara Moore

Lara Moore (Feb 1, 2024 10:23 CST)

Category #25101507

Item # 1000009342

1 Ton Regular Cab

SW0035

Dealer Name: CONFIDENCE FORD NORMAN

Make Bidding: FORD

Model Bidding: F-350 REGULAR CAB DRW

Model Code: 2024 F3C

Body & Chassis	Minimum Req.	Enter Vehicle Specifications and Manufacturer Option Codes
Gross Vehicle Weight Rating	10000 # GVW, Dual Rear Wheels	14000#
Wheelbase/CA	56 CA	142" WB / 56 CA
Bed	Standard Bed - 8'	YES
Engine		
Engine Type (Cylinder/Liter	8 Cyl/List HP/Specs	6.8 L V8/ 405 HP
Alternate Fuel Engine	List Type	TBD
Radiator		
Heavy Duty Radiator	Mfg. Std. List Size	HD 23.0 Liters
Transmission		
Automatic	Automatic/List Type	10 SPEED AUTOMATIC WITH SELECTSHIFT
Drive Axle		
Primary Drive Axle	Rear Wheel Drive	YES
Differential Type/Ratio	Reg. / List Ratio	3.73 Rear Axle
Electrical		
Alternator/Min (amps)	Mfg. Std. List Size	160 AMP
Battery min. (CCA)	Mfg. Std. List Size	750 CCA
Fuel		
Fuel Capacity min Liters(Gals)	Mfg. Std. List Amount in Gallons	34 GALLONS
Exterior		
Paint	One Color Paint	YES
Mirrors	Power Mirrors	YES
Doors & Windows		
Doors	2 Doors	YES
Door Locks	Power Locks, Keyless Entry	YES
Windows	Power Windows	YES
Floor		
Floor Covering	Vinyl/Rubber	YES
Interior		
Air Conditioning	Front AC Req.	YES
Radio	AM/FM	YES
Tilt & Cruise	Tilt Wheel & Cruise Control	YES
Seats		
Seating Capacity min.	2 Passenger	YES 3 PASSENGER
Seats	Cloth Bench Seat	YES 1S
Safety		
Brakes	4 Wheel Antilock/ List Disc/Drums	4 WHEEL ABS DISC
Restraint System All Pass	Req.	YES
Air Bags Both Sides	Req.	YES
Tires & Wheels		
Tires & Wheels	Mfg. Std. List Size	LT245/75R17E BSW A/S
Spare	Full Size Spare	YES
Warranty		
Bumper to Bumper Warranty	List Warranty	3 YEARS OR 36000 MILES
Drive Train Warranty	List Warranty	5 YEARS OR 60000 MILES
	PURCHASE PRICE:	\$47,299
	3YR LEASE PRICE	\$1,426
	4YR LEASE PRICE	\$1,098
	5YR LEASE PRICE	\$901
	MSRP FOR BASE PRICE:	\$49,600

+\$4688.60
\$51,987.60

Category #25101507
Item # 1000009342
1 Ton Regular Cab

Dealer Name: CONFIDENCE FORD NORMAN
Make Bidding: FORD
Model Bidding: F-350 REGULAR CAB DRW
Model Code: 2024 F3C

Body & Chassis		Mfg Codes / Notes	Purchase Price	3YR LEASE PRICE	4YR LEASE PRICE	5YR LEASE PRICE
Gross Vehicle Weight Rating	Decrease GVWR, Single Rear Wheels	F3A	\$1,416	-\$43	-\$33	-\$27
Shorter Bed	Short Bed - 6 1/2'	n/a on reg cab	\$0	\$0	\$0	\$0
Bed Delete	Delete Bed	N/A IN 2023	\$0	\$0	\$0	\$0
Engine						
Diesel Engine	Add Diesel Engine List /Cyl/Liters/HP	99T - 6.7L V8 PowerStroke Turbo Diesel 475hp (Ask about the 7.3L Gas Engine Option)	\$9,995	\$301	\$232	\$190
CNG Engine	List Size/Liters/HP	TBD	TBD	#VALUE!	#VALUE!	#VALUE!
Transmission						
Four Wheel Drive	Add Four Wheel Drive (4WD) w/ skid plates	F3D + 17X FX4 + TBM All Terrain Tires + X3E 3.73 E Lock	\$3,890	\$117	\$90	\$74
Transmission	Add 5 Speed Manual Trans.	n/a		\$0	\$0	\$0
PTO	Add PTO Provision	62R - Must Change Engine to 7.3L or 6.7L Diesel	\$280	\$8	\$6	\$5
Cooler	Delete Auxiliary Transmission Oil Cooler	n/a		\$0	\$0	\$0
Drive Axle						
Differential Type/Ratio	Add Limited Slip/Locking Diff	3.73 Ltd Slip	\$385	\$12	\$9	\$7
Ratio	Optional Rear Ratio List	X4L 4.30L Ltd Slip	\$395	\$12	\$9	\$8
Electrical						
Alternator	Larger Alternator List Amps	67E 240 Amp	\$85	\$3	\$2	\$2
Dual Alternator	Add Dual Alternator List Amps	67B 397 Amp - Must upgrade engine to 6.7L or 7.3L	\$115	\$3	\$3	\$2
Battery	Add Dual Batteries	86M	\$210	\$6	\$5	\$4
Power	Add 12 Volt Power Supply to Cab	43C 110V/400W Outlet	\$175	\$5	\$4	\$3
Lights	Add Daytime Running Lights	N/A	\$0	\$0	\$0	\$0
Lights	Disable Daytime Running Lights	Standard from Factory	\$0	\$0	\$0	\$0
Block Heater	Add Block Heater	41H	\$100	\$3	\$2	\$2
Exterior						
Side Steps	Black	18B	\$320	\$10	\$7	\$6
Side Steps	Chrome	CFN V	\$699	\$21	\$16	\$13
Trailer Mirrors	Telescoping Trailer Mirrors	Standard from Factory	\$0	\$0	\$0	\$0
Front Bumper	Add Chrome Front Bumper	17C	\$1,240	\$37	\$29	\$24
Rear Bumper	Add Chrome Rear Bumper	17C	\$1,240	\$37	\$29	\$24
Doors & Windows						
Door Locks & Windows	Delete Power Door Locks/Windows	N/A	\$0	\$0	\$0	\$0
Locks	Delete Keyless Entry	N/A	\$0	\$0	\$0	\$0
Locks	Add Burglar Alarm	Standard from Factory	\$0	\$0	\$0	\$0
Keys	Cost of Additional Keys	CFN Key Fob	\$399	\$12	\$9	\$8
Tinted Windows	Add Deep Tinted Glass	CFN I	\$699	\$21	\$16	\$13
Floor						
Floor Covering	Carpet with Floor Mats	17S STX Appearance Package	\$5,115	\$154	\$119	\$97
Mats	HD Floor Mats/ Husky Type Front Only - Available only when ordered with carpet	16S	\$135	\$4	\$3	\$3
Interior						
Air Conditioning	Delete AC	n/a	\$0	\$0	\$0	\$0
Radio	Add AM/FM CD	n/a	\$0	\$0	\$0	\$0
Upgrade	Upgrade to next Model Level	XLT (Ask about STX package to save)	\$6,145	\$185	\$143	\$117
Special Services Package	Special Services Package Model Change	n/a	\$0	\$0	\$0	\$0
Seats						
Seat	Delete Cloth	Option AS	-\$91	-\$3	-\$2	-\$2
Bucket Seats	Add Bucket Seats with Console	n/a on Reg Cab	\$0	\$0	\$0	\$0
Tires & Wheels						
Tires & Wheels	All Terrain Tires	TBM	\$165	\$5	\$4	\$3
Wheels	Add Chrome/Aluminium	642 20" Premium Polished	\$1,420	\$43	\$33	\$27
Spare Tire Lock	Add Factory Spare Tire Lock	Included	\$0	\$0	\$0	\$0
Towing						
Hitch	Add Hitch Wiring, Receiver	Standard from Factory	\$0	\$0	\$0	\$0
Electric Brake Controller	Add Electric Brake Controller	Standard from Factory	\$0	\$0	\$0	\$0
Hooks	Add Front Tow Hooks	Standard	\$0	\$0	\$0	\$0
Upfitter Switches	Add Factory Upfitter Switches	66S	\$165			
Delivery						
# 98 Delivery Cost	Price to Deliver Truck more than 150 miles	\$2 per mile				
Other						
Options not listed	Discount off MSRP for options not listed	4% off Not Listed Items and or Trim Level Price Diff.				

2kw POWER ONBOARD \$985 -4% \$\$945.60



Fire Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: James Kriwanek, Fire Chief
Subject: Approval of the purchase of Genesis extrication tools from Equipment Management Company for the Fire Department.

Background: In compliance with the City of Shawnee's Fiscal Year 2025 through 2029 Capital Improvement Plan (CIP), the Suppression Division of the Fire Department is scheduled to receive and replace current extrication equipment.

The proposed purchase of the Genesis extrication tools would replace a current older set and also add a set to our Ladder 1. This purchase would equip all front-line apparatus with interchangeable extrication equipment, thereby increasing efficiency and improving reliability of emergency response equipment.

Financial Impact: \$81,550.00; from Capital Improvement Fund, Fire Suppression, Capital Outlay - Equipment, 301-5-0720-54500

Attachments: Estimate 2899

Staff Recommendation: Approval of the item



GENESIS
RESCUE SYSTEMS



Equipment Management Company
22824 W Winchester Dr, Channahon, IL, United States
405-642-3731
rwilliams@genesiscrescue.com
Randy Williams

Genesis Rescue Systems

Quote

For: Equipment Management Company (Randy Williams) Estimate No: 2899
Date: 12/05/2024

Ship To: Free Shipping

Fire Department Shawnee Fire Dept

Part #	Description	Quantity	Rate	Amount
ART.109.173.6	S49 SL3 eForce	2	\$16,560.00	\$28,152.00
				Discount \$4,968.00
ART.110.215.1	SC240 SL3 NXT GEN Smooth Cut Blades 28V	2	\$14,640.00	\$24,888.00
				Discount \$4,392.00
ART.107.834.2	22-54 Telescopic Ram eForce	2	\$12,175.00	\$24,350.00
ART.105.410.9	Genesis 3 Bay Charger 120V	2	\$595.00	\$1,190.00
ART.105.375.5	M28 Milwaukee 28V 5ah Battery	6	\$550.00	\$2,970.00
				Discount \$330.00
ART.105.375.5	M28 Milwaukee 28V 5ah Battery	9	\$550.00	\$0.00
				Discount \$4,950.00
		Subtotal		\$81,550.00
		Shipping		\$0.00
		Total		\$81,550.00
			Total	\$81,550.00

Comments

Must be ordered by 12/31/24 for this pricing



Police Department
912 E. Independence St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: Mason Wilson, Police Chief
Subject: Approval of a lease agreement between the City of Shawnee and Enterprise FM Trust to replace vehicles for the Police Department.

Background: Enterprise FM Trust offers a vehicle leasing program that would allow the City of Shawnee Police Department to lease and maintain a newer fleet of vehicles. The current lease would encompass ten (10) 2025 Dodge Durango and two (2) 2025 Dodge Ram Tradesman vehicles. The goal is to replace Police's aging patrol and support fleet vehicles, which will assist the Department in significantly lowering maintenance costs. Furthermore, Enterprise FM Trust will sell the Police Department's older vehicles, and the resulting equity will be rolled into the leasing program.

The funds for the lease agreement are included in the current year Capital Improvement Plan for the City of Shawnee. The Fiscal Year 2025 cost of the lease will be \$120,598.80. The Department will use the remaining budgeted funds to purchase the needed equipment for the leased vehicles. As in years past, City staff will install the new equipment in-house, saving approximately \$8,500.00 per vehicle.

Staff is seeking approval from the City Commission for the proposed vehicle lease agreement and authorization for the City Manager to execute the necessary contractual documentation.

Financial Impact: \$120,598.80; funded by the Capital Improvement Fund - Capital Outlay-Equipment, 301-5-0620-54500

Attachments: Master Equity Lease Agreement - Government, GP3J - City of Shawnee Oklahoma - Addendum to Equity MLA - FM TRUST, Final Durango Quote, Final RAM 1500 Quote

Staff Recommendation: Approval of the item

MASTER EQUITY LEASE AGREEMENT

This Master Equity Lease Agreement is entered into this _____ day of _____, 20____, by and between Enterprise FM Trust, a Delaware statutory trust ("Lessor"), and the lessee whose name and address is set forth on the signature page below ("Lessee").

1. LEASE OF VEHICLES: Lessor hereby leases to Lessee and Lessee hereby leases from Lessor the vehicles (individually, a "Vehicle" and collectively, the "Vehicles") described in the schedules from time to time delivered by Lessor to Lessee as set forth below ("Schedule(s)") for the rentals and on the terms and conditions set forth in this Agreement and in the applicable Schedule. References to this "Agreement" shall include this Master Equity Lease Agreement and the various Schedules and addenda to this Master Equity Lease Agreement, each of which are incorporated herein as part of a single, unitary Agreement. Lessor will, on or about the date of delivery of each Vehicle to Lessee, send Lessee a Schedule covering the Vehicle, which will include, among other things, a description of the Vehicle, the lease term and the monthly rental and other payments due with respect to the Vehicle. The terms contained in each such Schedule will be binding on Lessee unless Lessee objects in writing to such Schedule within ten (10) days after the date of delivery of the Vehicle covered by such Schedule. Lessor is the sole legal owner of each Vehicle. This Agreement is a lease only and Lessee will have no right, title or interest in or to the Vehicles except for the use of the Vehicles as described in this Agreement. This Agreement shall be treated as a true lease for federal and applicable state income tax purposes with Lessor having all benefits of ownership of the Vehicles. It is understood and agreed that Enterprise Fleet Management, Inc. or an affiliate thereof (together with any subservicer, agent, successor or assign as servicer on behalf of Lessor, "Servicer") may administer this Agreement on behalf of Lessor and may perform the service functions herein provided to be performed by Lessor.

2. TERM: The term of this Agreement ("Term") for each Vehicle begins on the date such Vehicle is delivered to Lessee (the "Delivery Date") and, unless terminated earlier in accordance with the terms of this Agreement, continues for the "Lease Term" as described in the applicable Schedule.

3. RENT AND OTHER CHARGES:

(a) Lessee agrees to pay Lessor monthly rental and other payments according to the Schedules, Open-End (Equity) Lease Rate Quotes, and this Agreement. The monthly payments will be in the amount listed as the "Total Monthly Rental Including Additional Services" on the applicable Schedule (with any portion of such amount identified as a charge for maintenance services under Section 4 of the applicable Schedule being payable to Lessor as agent for Enterprise Fleet Management, Inc.) and will be due and payable in advance on the first day of each month. Lessee agrees to pay Lessor interest charges, in connection with the acquisition of a Vehicle, for the period between the date Lessor issues payment to acquire such Vehicle and the date the Vehicle is delivered to Lessee. Such interest charges shall be included in each Schedule. If a Vehicle is delivered to Lessee on any day other than the first day of a month, monthly rental payments will begin on the first day of the next month. In addition to the monthly rental payments, Lessee agrees to pay Lessor a pro-rated rental charge for the number of days that the Delivery Date precedes the first monthly rental payment date. A portion of each monthly rental payment, being the amount designated as "Depreciation Reserve" on the applicable Schedule, will be considered as a reserve for depreciation and will be credited against the Delivered Price of the Vehicle for purposes of computing the Book Value of the Vehicle under Section 3(c). Lessee agrees to pay Lessor the "Total Initial Charges" set forth in each Schedule on the due date of the first monthly rental payment under such Schedule. Lessee agrees to pay Lessor the "Service Charge Due at Lease Termination" set forth in each Schedule at the end of the applicable Term (whether by reason of expiration, early termination or otherwise).

(b) In the event the Term for any Vehicle ends prior to the last day of the scheduled Term, whether as a result of a default by Lessee, a Casualty Occurrence or any other reason, the rentals and management fees paid by Lessee will be recalculated in accordance with the rule of 78's and the adjusted amount will be payable by Lessee to Lessor on the termination date.

(c) Lessee agrees to pay Lessor within thirty (30) days after the end of the Term for each Vehicle, additional rent equal to the excess, if any, of the Book Value of such Vehicle over the greater of (i) the wholesale value of such Vehicle as determined by Lessor in good faith or (ii) except as provided below, twenty percent (20%) of the Delivered Price of such Vehicle as set forth in the applicable Schedule. If the Book Value of such Vehicle is less than the greater of (i) the wholesale value of such Vehicle as determined by Lessor in good faith or (ii) except as provided below, twenty percent (20%) of the Delivered Price of such Vehicle as set forth in the applicable Schedule, Lessor agrees to pay such deficiency to Lessee as a terminal rental adjustment after the end of the applicable Term (subject to Lessor's right to recoup any amounts Lessor would owe to Lessee under this Section 3(c) against any obligations of Lessee to Lessor under this Agreement). Notwithstanding the foregoing, if (i) the Term for a Vehicle is greater than forty-eight (48) months (including any extension of the Term for such Vehicle), (ii) the mileage on a Vehicle at the end of the Term is greater than 15,000 miles per year on average (prorated on a daily basis) (i.e., if the mileage on a Vehicle with a Term of thirty-six (36) months is greater than 45,000 miles) or (iii) in the sole judgment of Lessor, a Vehicle has been subject to damage or any abnormal or excessive wear and tear, the calculations described in the two immediately preceding sentences shall be made without giving effect to clause (ii) in each such sentence. The "Book Value" of a Vehicle means the sum of (i) the "Delivered Price" of the Vehicle as set forth in the applicable Schedule minus (ii) the total Depreciation Reserve paid by Lessee to Lessor with respect to such Vehicle plus (iii) all accrued and unpaid rent and/or other amounts owed by Lessee with respect to such Vehicle.

(d) Any security deposit of Lessee will be returned to Lessee at the end of the applicable Term, except that the deposit will first be applied to and recouped against any losses and/or damages suffered by Lessor as a result of Lessee's breach of or default under this Agreement and/or to any other amounts then owed by Lessee to Lessor.

(e) Any rental payment or other amount owed by Lessee to Lessor which is not paid within twenty (20) days after its due date will accrue interest, payable on demand of Lessor, from the date due until paid in full at a rate per annum equal to the lesser of (i) Eighteen Percent (18%) per annum or (ii) the highest rate permitted by applicable law (the "Default Rate").

(f) If Lessee fails to pay any amount due under this Agreement or to comply with any of the covenants contained in this Agreement, Lessor, Servicer or any other agent of Lessor may, at its option, pay such amounts or perform such covenants and all sums paid or incurred by Lessor in connection therewith will be repayable by Lessee to Lessor upon demand together with interest thereon at the Default Rate.

(g) Lessee's obligations to make all payments of rent and other amounts under this Agreement are absolute and unconditional and such payments shall be made in immediately available funds without setoff, counterclaim or deduction of any kind. Lessee acknowledges and agrees that neither any Casualty Occurrence to any Vehicle nor any defect, unfitness or lack of governmental approval in, of, or with respect to, any Vehicle regardless of the cause or consequence nor any breach by Enterprise Fleet Management, Inc. of any maintenance agreement between Enterprise Fleet Management, Inc. and Lessee covering any Vehicle regardless of the cause or consequence will relieve Lessee from the performance of any of its obligations under this Agreement, including, without limitation, the payment of rent and other amounts under this Agreement.

(h) In the event Lessor, Servicer or any other agent of Lessor arranges for rental vehicle(s) with a subsidiary or affiliate of Enterprise Holdings, Inc., Lessee shall be fully responsible for all obligations under any applicable rental agreement.

4. USE AND SURRENDER OF VEHICLES: Lessee agrees to allow only duly authorized, licensed and insured drivers to use and operate the Vehicles. Lessee agrees to comply with, and cause its drivers to comply with, all laws, statutes, rules, regulations and ordinances (including without limitation such federal, state and local laws, statutes, rules, regulations and ordinances governing autonomous vehicles and automated driving systems and any parts, components and products related thereto) and the provisions of all insurance policies affecting or covering the Vehicles or their use or operation. In connection with autonomous vehicles and automated driving systems and the parts, components and products related thereto, Lessee agrees to comply with all applicable guidance and professional standards issued, released or published by governmental and quasi-governmental agencies, including without limitation the federal guidance for automated vehicles published by the Department of Transportation and the Federal Automated Vehicle Policy issued by the U.S. Department of Transportation and the National Highway Traffic Safety Administration. Lessee agrees to keep the Vehicles free of all liens, charges and encumbrances. Lessee agrees that in no event will any Vehicle be used or operated for transporting hazardous substances or persons for hire, for any illegal purpose or to pull trailers that exceed the manufacturer's trailer towing recommendations. Lessee agrees that no Vehicle is intended to be or will be utilized as a "school bus" as defined in the Code of Federal Regulations or any applicable state or municipal statute or regulation. Lessee agrees not to remove any Vehicle from the continental United States without first obtaining Lessor's written consent. At the expiration or earlier termination of this Agreement with respect to each Vehicle, or upon demand by Lessor made pursuant to Section 14, Lessee at its risk and expense agrees to return such Vehicle to Lessor at such place and by such reasonable means as may be designated by Lessor. If for any reason Lessee fails to return any Vehicle to Lessor as and when required in accordance with this Section, Lessee agrees to pay Lessor additional rent for such Vehicle at twice the normal pro-rated daily rent. Acceptance of such additional rent by Lessor will in no way limit Lessor's remedies with respect to Lessee's failure to return any Vehicle as required hereunder.

5. COSTS, EXPENSES, FEES AND CHARGES: Lessee agrees to pay all costs, expenses, fees, charges, fines, tickets, penalties and taxes (other than federal and state income taxes on the income of Lessor) incurred in connection with the titling, licensing, registration, delivery, purchase, sale, rental, and Lessee's use or operation of the Vehicles. If Lessor, Servicer or any other agent of Lessor incurs any such costs or expenses, Lessee agrees to promptly reimburse Lessor for the same.

6. LICENSE AND CHARGES: Each Vehicle will be titled, registered and licensed in the name designated by Lessor at Lessee's expense. Certain other charges relating to the acquisition of each Vehicle and paid or satisfied by Lessor have been capitalized in determining the monthly rental, treated as an initial charge or otherwise charged to Lessee. Such charges have been determined without reduction for trade-in, exchange allowance or other credit attributable to any Lessor-owned vehicle.

7. REGISTRATION PLATES, ETC.: Lessee agrees, at its expense, to obtain in the name designated by Lessor all registration plates and other plates, permits, inspections and/or licenses required in connection with the Vehicles, except for the initial registration plates which Lessor will obtain at Lessee's expense. The parties agree to cooperate and to furnish any and all information or documentation, which may be reasonably necessary for compliance with the provisions of this Section or any federal, state or local law, rule, regulation or ordinance. Lessee agrees that it will not permit any Vehicle to be located in a state other than the state in which such Vehicle is then titled for any continuous period of time that would require such Vehicle to become subject to the titling, licensing and/or registration laws of such other state.

8. MAINTENANCE OF AND IMPROVEMENTS TO VEHICLES:

(a) Lessee agrees, at its expense, to (i) maintain the Vehicles in good condition, repair, maintenance and running order and in accordance with all manufacturer's instructions and warranty requirements and all legal requirements and (ii) furnish all labor, materials, parts and other essentials required for the proper operation and maintenance of the Vehicles. Lessee will not make (or cause to be made) any alterations, upgrades, upfitting, additions or improvements (collectively, "Alterations") to any Vehicle which (i) could impact or impair the "motor vehicle safety" (as defined by the Motor Vehicle Safety Act) of the Vehicle, or (ii) could impact, impair, void or render unenforceable the manufacturer's warranty. Without the prior written consent of Lessor, Lessee will not make (or cause to be made) any Alterations to any Vehicle which (i) detracts, impairs, damages or alters the Vehicle's nature, purpose, economic value, remaining useful life, functionality, utility, software or controls, or (ii) subjects the Vehicle or any part or component of such Vehicle to any lien, charge or encumbrance. Any Alterations of any nature to a Vehicle are made at Lessee's sole cost, risk and liability, including without limitation, any such Alterations approved by, or made with the assistance or at the direction of Lessor. Any replacement parts added to any Vehicle shall be in at least as good an operating condition as the prior part before the replacement (assuming such part was, at the time of the replacement, in the condition required by the terms of this Agreement). Any Alterations to a Vehicle will become and remain the property of Lessor and will be returned with such Vehicle upon such Vehicle's return pursuant to Section 4 and shall be free of any liens, charges or encumbrances; provided, however, Lessor shall have the right at any time to require Lessee to remove any such Alteration at Lessee's sole cost, expense and liability. In no event or instance shall the value of any Alterations be regarded as rent. Lessee and Lessor acknowledges and agrees that Lessor will not be required to make any repairs, replacements or Alterations of any nature or description with respect to any Vehicle, to maintain or repair any Vehicle or to make any

expenditure whatsoever in connection with any such Vehicle(s) or this Agreement.

(b) Lessor and Lessee acknowledge and agree that if Section 4 of a Schedule includes a charge for maintenance, (i) the Vehicle(s) covered by such Schedule are subject to a separate maintenance agreement between Enterprise Fleet Management, Inc. and Lessee and (ii) Lessor shall have no liability or responsibility for any failure of Enterprise Fleet Management, Inc. to perform any of its obligations thereunder or to pay or reimburse Lessee for its payment of any costs and expenses incurred in connection with the maintenance or repair of any such Vehicle(s).

9. SELECTION OF VEHICLES AND DISCLAIMER OF WARRANTIES:

(a) LESSEE ACCEPTANCE OF DELIVERY AND USE OF EACH VEHICLE WILL CONCLUSIVELY ESTABLISH THAT SUCH VEHICLE IS OF A SIZE, DESIGN, CAPACITY, TYPE AND MANUFACTURE SELECTED BY LESSEE AND THAT SUCH VEHICLE IS IN GOOD CONDITION AND REPAIR AND IS SATISFACTORY IN ALL RESPECTS AND IS SUITABLE FOR LESSEE'S PURPOSE. LESSEE ACKNOWLEDGES THAT LESSOR IS NOT A MANUFACTURER OF ANY VEHICLE OR AN AGENT OF A MANUFACTURER OF ANY VEHICLE.

(b) LESSOR MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO ANY VEHICLE, INCLUDING, WITHOUT LIMITATION, ANY REPRESENTATION OR WARRANTY AS TO CONDITION, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, IT BEING AGREED THAT ALL SUCH RISKS ARE TO BE BORNE BY LESSEE. THE VEHICLES ARE LEASED "AS IS," "WITH ALL FAULTS." All warranties made by any supplier, vendor and/or manufacturer of a Vehicle are hereby assigned by Lessor to Lessee for the applicable Term and Lessee's only remedy, if any, is against the supplier, vendor or manufacturer of the Vehicle.

(c) None of Lessor, Servicer or any other agent of Lessor will be liable to Lessee for any liability, claim, loss, damage (direct, incidental or consequential) or expense of any kind or nature, caused directly or indirectly, by any Vehicle or any inadequacy of any Vehicle for any purpose or any defect (latent or patent) in any Vehicle or the use or maintenance of any Vehicle or any repair, servicing or adjustment of or to any Vehicle, or any delay in providing or failure to provide any Vehicle, or any interruption or loss of service or use of any Vehicle, or any loss of business or any damage whatsoever and however caused. In addition, none of Lessor, Servicer or any other agent of Lessor will have any liability to Lessee under this Agreement or under any order authorization form executed by Lessee if Lessor is unable to locate or purchase a Vehicle ordered by Lessee or for any delay in delivery of any Vehicle ordered by Lessee.

(d) In no event shall Lessor, Servicer or any other agent of Lessor or their respective affiliates be liable for consequential, indirect, incidental, special, exemplary, punitive or enhanced damages, lost profits or revenues or diminution in value, arising out of or relating to this Agreement, including, without limitation, any breach or performance of this Agreement, regardless of (i) whether such damages were foreseeable, (ii) whether or not Lessor, Servicer or any other agent of Lessor or their respective affiliates were advised of the possibility of such damages and/or (iii) the legal or equitable theory (contract, tort or otherwise) upon which a claim, action, cause of action, demand, lawsuit, arbitration, inquiry, proceeding or litigation is based, and notwithstanding the failure of any agreed or other remedy of its essential purpose.

10. RISK OF LOSS: Lessee assumes and agrees to bear the entire risk of loss of, theft of, damage to or destruction of any Vehicle from any cause whatsoever ("Casualty Occurrence"). In the event of a Casualty Occurrence to a Vehicle, Lessee shall give Lessor prompt notice of the Casualty Occurrence and thereafter will place the applicable Vehicle in good repair, condition and working order; provided, however, that if the applicable Vehicle is determined by Lessor to be lost, stolen, destroyed or damaged beyond repair (a "Totaled Vehicle"), Lessee agrees to pay Lessor no later than the date thirty (30) days after the date of the Casualty Occurrence the amounts owed under Sections 3(b) and 3(c) with respect to such Totaled Vehicle. Upon such payment, this Agreement will terminate with respect to such Totaled Vehicle.

11. INSURANCE:

(a) Lessee agrees to purchase and maintain in force during the Term, insurance policies in at least the amounts listed below covering each Vehicle, to be written by an insurance company or companies satisfactory to Lessor, insuring Lessee, Lessor and any other person or entity designated by Lessor against any damage, claim, suit, action or liability, and that Lessor will suffer immediate and irreparable harm if Lessee fails to comply with such obligations:

(i) Commercial Automobile Liability Insurance (including Uninsured/Underinsured Motorist Coverage and No-Fault Protection where required by law) for the limits listed below (Note - \$2,000,000 Combined Single Limit Bodily Injury and Property Damage per accident with No Deductible is required for each Vehicle capable of transporting more than 8 passengers):

State of Vehicle Registration	Coverage
Connecticut, Massachusetts, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont	\$1,000,000 Combined Single Limit Bodily Injury and Property Damage per accident - No Deductible
Florida	\$500,000 Combined Single Limit Bodily Injury and Property Damage per accident or \$100,000 Bodily Injury Per Person Per Accident, \$300,000 Per Accident and \$50,000 Property Damage per accident (100/300/50) - No Deductible
All Other States	\$300,000 Combined Single Limit Bodily Injury and Property Damage Per Accident or \$100,000 Bodily Injury Per Person Per Accident, \$300,000 Per Accident and \$50,000 Property Damage Per Accident (100/300/50) - No Deductible

Initials: EFM_____ Customer_____

- (ii) Physical Damage Insurance (Collision & Comprehensive): Actual cash value of the applicable Vehicle. Maximum deductible of \$1,000 per accident - Collision and \$1,000 per accident - Comprehensive).

If the requirements of any governmental or regulatory agency exceed the minimums stated in this Agreement, Lessee must obtain and maintain the higher insurance requirements. Lessee agrees that each required policy of insurance will by appropriate endorsement or otherwise name Lessor and any other person or entity designated by Lessor as additional insureds and loss payees, as their respective interests may appear. Further, each such insurance policy must provide the following: (i) that the same may not be cancelled, changed or modified until after the insurer has given to Lessor, Servicer and any other person or entity designated by Lessor at least thirty (30) days prior written notice of such proposed cancellation, change or modification, (ii) that no act or default of Lessee or any other person or entity shall affect the right of Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns to recover under such policy or policies of insurance in the event of any loss of or damage to any Vehicle and (iii) that the coverage is "primary coverage" for the protection of Lessee, Lessor, Servicer, any other agent of Lessor and their respective successors and assigns notwithstanding any other coverage carried by Lessee, Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns protecting against similar risks. Original certificates evidencing such coverage and naming Lessor, Servicer, any other agent of Lessor and any other person or entity designated by Lessor as additional insureds and loss payees shall be furnished to Lessor prior to the Delivery Date, and annually thereafter and/or as reasonably requested by Lessor from time to time. In the event of default, Lessee hereby appoints Lessor, Servicer and any other agent of Lessor as Lessee's attorney-in-fact to receive payment of, to endorse all checks and other documents and to take any other actions necessary to pursue insurance claims and recover payments if Lessee fails to do so. Any expense of Lessor, Servicer or any other agent of Lessor in adjusting or collecting insurance shall be borne by Lessee.

Lessee, its drivers, servants and agents agree to cooperate fully with Lessor, Servicer, any other agent of Lessor and any insurance carriers in the investigation, defense and prosecution of all claims or suits arising from the use or operation of any Vehicle. If any claim is made or action commenced for death, personal injury or property damage resulting from the ownership, maintenance, use or operation of any Vehicle, Lessee will promptly notify Lessor of such action or claim and forward to Lessor a copy of every demand, notice, summons or other process received in connection with such claim or action.

(b) Notwithstanding the provisions of Section 11(a) above: (i) if Section 4 of a Schedule includes a charge for physical damage waiver, Lessor agrees that (A) Lessee will not be required to obtain or maintain the minimum physical damage insurance (collision and comprehensive) required under Section 11(a) for the Vehicle(s) covered by such Schedule and (B) Lessor will assume the risk of physical damage (collision and comprehensive) to the Vehicle(s) covered by such Schedule; provided, however, that such physical damage waiver shall not apply to, and Lessee shall be and remain liable and responsible for, damage to a covered Vehicle caused by wear and tear or mechanical breakdown or failure, damage to or loss of any parts, accessories or components added to a covered Vehicle by Lessee without the prior written consent of Lessor and/or damage to or loss of any property and/or personal effects contained in a covered Vehicle. In the event of a Casualty Occurrence to a covered Vehicle, Lessor may, at its option, replace, rather than repair, the damaged Vehicle with an equivalent vehicle, which replacement vehicle will then constitute the "Vehicle" for purposes of this Agreement; and (ii) if Section 4 of a Schedule includes a charge for commercial automobile liability enrollment, Lessor agrees that it will, at its expense, obtain for and on behalf of Lessee, by adding Lessee as an additional insured under a commercial automobile liability insurance policy issued by an insurance company selected by Lessor, commercial automobile liability insurance satisfying the minimum commercial automobile liability insurance required under Section 11(a) for the Vehicle(s) covered by such Schedule. Lessor may at any time during the applicable Term terminate said obligation to provide physical damage waiver and/or commercial automobile liability enrollment and cancel such physical damage waiver and/or commercial automobile liability enrollment upon giving Lessee at least ten (10) days prior written notice. Upon such cancellation, insurance in the minimum amounts as set forth in 11(a) shall be obtained and maintained by Lessee at Lessee's expense. An adjustment will be made in monthly rental charges payable by Lessee to reflect any such change and Lessee agrees to furnish Lessor with satisfactory proof of insurance coverage within ten (10) days after mailing of the notice. In addition, Lessor may change the rates charged by Lessor under this Section 11(b) for physical damage waiver and/or commercial automobile liability enrollment upon giving Lessee at least thirty (30) days prior written notice.

12. INDEMNITY: To the extent permitted by state law, Lessee agrees to defend and indemnify Lessor, Servicer, any other agent of Lessor and their respective successors and assigns from and against any and all losses, damages, liabilities, suits, claims, demands, costs and expenses (including, without limitation, reasonable attorneys' fees and expenses) which Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns may incur by reason of Lessee's breach or violation of, or failure to observe or perform, any term, provision or covenant of this Agreement, or as a result of any loss, damage, theft or destruction of any Vehicle or related to or arising out of or in connection with the use, operation or condition of any Vehicle. The provisions of this Section 12 shall survive any expiration or termination of this Agreement. Nothing herein shall be deemed to affect the rights, privileges, and immunities of Lessee and the foregoing indemnity provision is not intended to be a waiver of any sovereign immunity afforded to Lessee pursuant to the law.

13. INSPECTION OF VEHICLES; ODOMETER DISCLOSURE; FINANCIAL STATEMENTS: Lessee agrees to accomplish, at its expense, all inspections of the Vehicles required by any governmental authority during the Term. Lessor, Servicer, any other agent of Lessor and any of their respective successors or assigns will have the right to inspect any Vehicle at any reasonable time(s) during the Term and for this purpose to enter into or upon any building or place where any Vehicle is located. Lessee agrees to comply with all odometer disclosure laws, rules and regulations and to provide such written and signed disclosure information on such forms and in such manner as directed by Lessor. Providing false information or failure to complete the odometer disclosure form as required by law may result in fines and/or imprisonment. Lessee hereby agrees to promptly deliver to Lessor such financial statements and other financial information regarding Lessee as Lessor may from time to time reasonably request.

14. DEFAULT; REMEDIES: The following shall constitute events of default ("Events of Default") by Lessee under this Agreement: (a) if Lessee fails to pay when due any rent or other amount due under this Agreement and any such failure shall remain unremedied for ten (10) days; (b) if Lessee fails to perform, keep or observe any term, provision or covenant contained in Section 11 of this Agreement; (c) if Lessee fails to perform, keep or observe any other term, provision or covenant contained in this Agreement and any such failure shall remain unremedied for thirty (30) days after written notice thereof is given by Lessor, Servicer or any other agent of Lessor to Lessee; (d) any seizure or confiscation of any Vehicle or any other act (other than a Casualty Occurrence) otherwise rendering any Vehicle unsuitable for use (as determined by Lessor); (e) if any present or future guaranty in favor of Lessor of all or any portion of the obligations of Lessee under this Agreement shall at any time for any reason cease to be in full force and effect or shall be declared to be null and void by a court of competent jurisdiction, or

if the validity or enforceability of any such guaranty shall be contested or denied by any guarantor, or if any guarantor shall deny that it, he or she has any further liability or obligation under any such guaranty or if any guarantor shall fail to comply with or observe any of the terms, provisions or conditions contained in any such guaranty; (f) the occurrence of a material adverse change in the financial condition, a going concern audit comment of Lessee or any guarantor, or if Lessee admits that it cannot pay its debts as they become due, makes an assignment for the benefit of creditors, is the subject of a voluntary or involuntary petition for bankruptcy, is adjudged insolvent or bankrupt, or a receiver or trustee is appointed for any portion of Lessee's assets or property; (g) if more than one (1) payment by Lessee to Lessor is returned by Lessee's bank for any reason within a twelve (12) month period; or (h) if Lessee or any guarantor is in default under or fails to comply with any other present or future agreement with or in favor of Lessor, Servicer of Lessor, or any direct or indirect subsidiary of Servicer of Lessor, Enterprise Holdings, Inc. or a subsidiary or affiliate of Enterprise Holdings, Inc.. For purposes of this Section 14, the term "guarantor" shall mean any present or future guarantor of all or any portion of the obligations of Lessee under this Agreement.

Upon the occurrence of any Event of Default, Lessor, without notice to Lessee, will have the right to exercise concurrently or separately (and without any election of remedies being deemed made), the following remedies: (a) Lessor may demand and receive immediate possession of any or all of the Vehicles from Lessee, without releasing Lessee from its obligations under this Agreement; if Lessee fails to surrender possession of the Vehicles to Lessor on default (or termination or expiration of the Term), Lessor, Servicer, any other agent of Lessor and any of Lessor's independent contractors shall have the right to enter upon any premises where the Vehicles may be located and to remove and repossess the Vehicles; (b) Lessor may enforce performance by Lessee of its obligations under this Agreement; (c) Lessor may recover damages and expenses sustained by Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns by reason of Lessee's default including, to the extent permitted by applicable law, all costs and expenses, including court costs and reasonable attorneys' fees and expenses, incurred by Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns in attempting or effecting enforcement of Lessor's rights under this Agreement (whether or not litigation is commenced) and/or in connection with bankruptcy or insolvency proceedings; (d) upon written notice to Lessee, Lessor may terminate Lessee's rights under this Agreement; (e) with respect to each Vehicle, Lessor may recover from Lessee all amounts owed by Lessee under Sections 3(b) and 3(c) of this Agreement (and, if Lessor does not recover possession of a Vehicle, (i) the estimated wholesale value of such Vehicle for purposes of Section 3(c) shall be deemed to be \$0.00 and (ii) the calculations described in the first two sentences of Section 3(c) shall be made without giving effect to clause (ii) in each such sentence); and/or (f) Lessor may exercise any other right or remedy which may be available to Lessor under the Uniform Commercial Code, any other applicable law or in equity. A termination of this Agreement shall occur only upon written notice by Lessor to Lessee. Any termination shall not affect Lessee's obligation to pay all amounts due for periods prior to the effective date of such termination or Lessee's obligation to pay any indemnities under this Agreement. All remedies of Lessor under this Agreement or at law or in equity are cumulative.

15. ASSIGNMENTS: Lessor may from time to time assign, pledge or transfer this Agreement and/or any or all of its rights and obligations under this Agreement to any person or entity. Lessee agrees, upon notice of any such assignment, pledge or transfer of any amounts due or to become due to Lessor under this Agreement to pay all such amounts to such assignee, pledgee or transferee. Any such assignee, pledgee or transferee of any rights or obligations of Lessor under this Agreement will have all of the rights and obligations that have been assigned to it. Lessee's rights and interest in and to the Vehicles are and will continue at all times to be subject and subordinate in all respects to any assignment, pledge or transfer now or hereafter executed by Lessor with or in favor of any such assignee, pledgee or transferee, provided that Lessee shall have the right of quiet enjoyment of the Vehicles so long as no Event of Default under this Agreement has occurred and is continuing. Lessee acknowledges and agrees that the rights of any assignee, pledgee or transferee in and to any amounts payable by the Lessee under any provisions of this Agreement shall be absolute and unconditional and shall not be subject to any abatement whatsoever, or to any defense, setoff, counterclaim or recoupment whatsoever, whether by reason of any damage to or loss or destruction of any Vehicle or by reason of any defect in or failure of title of the Lessor or interruption from whatsoever cause in the use, operation or possession of any Vehicle, or by reason of any indebtedness or liability howsoever and whenever arising of the Lessor or any of its affiliates to the Lessee or to any other person or entity, or for any other reason.

Without the prior written consent of Lessor, Lessee may not assign, sublease, transfer or pledge this Agreement, any Vehicle, or any interest in this Agreement or in and to any Vehicle, or permit its rights under this Agreement or any Vehicle to be subject to any lien, charge or encumbrance. Lessee's interest in this Agreement is not assignable and cannot be assigned or transferred by operation of law. Lessee will not transfer or relinquish possession of any Vehicle (except for the sole purpose of repair or service of such Vehicle) without the prior written consent of Lessor.

16. MISCELLANEOUS: This Agreement contains the entire understanding of the parties. This Agreement may only be amended or modified by an instrument in writing executed by both parties. Lessor shall not by any act, delay, omission or otherwise be deemed to have waived any of its rights or remedies under this Agreement and no waiver whatsoever shall be valid unless in writing and signed by Lessor and then only to the extent therein set forth. A waiver by Lessor of any right or remedy under this Agreement on any one occasion shall not be construed as a bar to any right or remedy, which Lessor would otherwise have on any future occasion. If any term or provision of this Agreement or any application of any such term or provision is invalid or unenforceable, the remainder of this Agreement and any other application of such term or provision will not be affected thereby. Without Lessor's prior written consent, Lessee shall not use or include Lessor's, Servicer's, any other agent of Lessor's names or trademarks orally or in writing in any media, customer lists or marketing materials. Giving of all notices under this Agreement will be sufficient if mailed by certified mail to a party at its address set forth below or at such other address as such party may provide in writing from time to time. Any such notice mailed to such address will be effective one (1) day after deposit in the United States mail, duly addressed, with certified mail, postage prepaid. Lessee will promptly notify Lessor of any change in Lessee's address. This Agreement may be executed in multiple counterparts (including facsimile and pdf counterparts), but the counterpart marked "ORIGINAL" by Lessor will be the original lease for purposes of applicable law. All of the representations, warranties, covenants, agreements and obligations of each Lessee under this Agreement (if more than one) are joint and several.

17. SUCCESSORS AND ASSIGNS; GOVERNING LAW: Subject to the provisions of Section 15, this Agreement will be binding upon Lessee and its heirs, executors, personal representatives, successors and assigns, and will inure to the benefit of Lessor, Servicer, any other agent of Lessor and their respective successors and assigns. This Agreement will be governed by and construed in accordance with the substantive laws of the State of Missouri (determined without reference to conflict of law principles).

18. NON-PETITION: Each party hereto hereby covenants and agrees that, prior to the date which is one year and one day after payment in full of all indebtedness

of Lessor, it shall not institute against, or join any other person in instituting against, Lessor any bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings or other similar proceeding under the laws of the United States or any state of the United States. The provisions of this Section 18 shall survive termination of this Master Equity Lease Agreement.

19. NON-APPROPRIATION: Lessee's funding of this Agreement shall be on a Fiscal Year basis and is subject to annual appropriations. Lessor acknowledges that Lessee is a municipal corporation, is precluded by the County or State Constitution and other laws from entering into obligations that financially bind future governing bodies, and that, therefore, nothing in this Agreement shall constitute an obligation of future legislative bodies of the County or State to appropriate funds for purposes of this Agreement. Accordingly, the parties agree that the lease terms within this Agreement or any Schedules relating hereto are contingent upon appropriation of funds. The parties further agree that should the County or State fail to appropriate such funds, the Lessor shall be paid all rentals due and owing hereunder up until the actual day of termination. In addition, Lessor reserves the right to be paid for any reasonable damages. These reasonable damages will be limited to the losses incurred by the Lessor for having to sell the vehicles on the open used car market prior to the end of the scheduled term (as determined in Section 3 and Section 14 of this Agreement).

IN WITNESS WHEREOF, Lessor and Lessee have duly executed this Master Equity Lease Agreement as of the day and year first above written.

LESSEE: _____	LESSOR: Enterprise FM Trust
Signature: _____	By: Enterprise Fleet Management, Inc. its attorney in fact
By: _____	Signature: _____
Title: _____	By: _____
Address: _____	Title: _____
_____	Address: _____
_____	_____
Date Signed: _____, _____	Date Signed: _____, _____

AMENDMENT TO MASTER EQUITY LEASE AGREEMENT

THIS AMENDMENT ("Amendment") dated this ____ day of _____, 2024 is attached to, and made a part of, the MASTER EQUITY LEASE AGREEMENT entered into on the ____ day of _____, 2024 ("Agreement") by and between Enterprise FM Trust, a Delaware statutory trust ("Lessor") and City of Shawnee, Oklahoma ("Lessee"). This Amendment is made for good and valuable consideration, the receipt of which is hereby acknowledged by the parties.

Section 3(c) of the Master Equity Lease Agreement is amended to read as follows:

Lessee agrees to pay Lessor within thirty (30) days after receipt of the consolidated invoice for each termed Vehicle, additional rent equal to the excess, if any, of the Book Value of such Vehicle over the greater of (i) the wholesale value of such Vehicle as determined by Lessor in good faith or (ii) except as provided below, twenty percent (20%) of the Delivered Price of such Vehicle as set forth in the applicable Schedule. If the Book Value of such Vehicle is less than the greater of (i) the wholesale value of such Vehicle as determined by Lessor in good faith or (ii) except as provided below, twenty percent (20%) of the Delivered Price of such Vehicle as set forth in the applicable Schedule, Lessor agrees to pay such deficiency to Lessee as a terminal rental adjustment within thirty (30) days after the end of the applicable Term. Notwithstanding the foregoing, if (i) the Term for a Vehicle is greater than forty-eight (48) months (including any extension of the Term for such Vehicle), (ii) the mileage on a Vehicle at the end of the Term is greater than 15,000 miles per year on average (prorated on a daily basis) (i.e., if the mileage on a Vehicle with a Term of thirty-six (36) months is greater than 45,000 miles) or (iii) in the sole judgment of Lessor, a Vehicle has been subject to damage or any abnormal or excessive wear and tear, the calculations described in the two immediately preceding sentences shall be made without giving effect to clause (ii) in each such sentence. The "Book Value" of a Vehicle means the sum of (i) the "Delivered Price" of the Vehicle as set forth in the applicable Schedule minus (ii) the total Depreciation Reserve paid by Lessee to Lessor with respect to such Vehicle plus (iii) all accrued and unpaid rent and/or other amounts owed by Lessee with respect to such Vehicle.

Section 3(e) of the Master Equity Lease Agreement is amended to read as follows:

Any rental payment or other amount owed by Lessee to Lessor which is not paid within thirty (30) days after its due date will accrue interest, payable on demand of Lessor, from the date due until paid in full at a rate per annum equal to the lesser of (i) Eighteen Percent (18%) per annum or (ii) the highest rate permitted by Oklahoma state law (the "Default Rate").

Section 8(a) of the Master Equity Lease Agreement is amended to read as follows:

Lessee agrees, at its expense, to (i) maintain the Vehicles in good condition, repair, maintenance and running order and in accordance with all manufacturer's instructions and warranty requirements and all legal requirements and (ii) furnish all labor, materials, parts and other essentials required for the proper operation and maintenance of the Vehicles. Any alterations, additions, replacement parts or improvements to a Vehicle will become and remain the property of Lessor and will be returned with such Vehicle upon such Vehicle's return pursuant to Section 4. Lessor acknowledges that Lessee will attach removal equipment to Vehicle and Lessor agrees that use of such equipment by Lessee is permitted and Lessor agrees that such equipment may be removed by Lessee prior to the Vehicle's return to Lessor. Notwithstanding the foregoing, so long as no Event of Default has occurred and is continuing, Lessee shall have the right to remove any additional equipment installed by Lessee on a Vehicle prior to returning such Vehicle to Lessor under Section 4. The value of such alterations, additions, replacement parts and improvements will in no instance be regarded as rent. Without the prior written consent of Lessor, Lessee will not make any alterations, additions, replacement parts or improvements to any Vehicle which detract from its economic value or functional utility. Lessor will not be required to make any repairs or replacements of any nature or description with respect to any Vehicle, to maintain or repair any Vehicle or to make any expenditure whatsoever in connection with any Vehicle or this Agreement.

Section 9(e) of the Master Equity Lease Agreement is amended by adding the following paragraph:

Except for liability for (i) indemnification or (ii) gross negligence or willful misconduct, Lessee shall not be liable for consequential, indirect, incidental, special, exemplary, punitive or enhanced damages, lost profits or revenues or diminution in value, arising out of or relating to this Agreement, including, without limitation, any breach or

performance of this Agreement, regardless of (i) whether such damages were foreseeable, (ii) whether or not Lessee was advised of the possibility of such damages and/or (iii) the legal or equitable theory (contract, tort or otherwise) upon which a claim, action, cause of action, demand, lawsuit, arbitration, inquiry, proceeding or litigation is based, and notwithstanding the failure of any agreed or other remedy of its essential purpose.

Section 10 of the Master Equity Lease Agreement is amended to read as follows:

Lessee assumes and agrees to bear the entire risk of loss of, theft of, damage to or destruction of any Vehicle from any cause whatsoever ("Casualty Occurrence"). In the event of a Casualty Occurrence to a Vehicle, Lessee shall give Lessor prompt notice of the Casualty Occurrence and thereafter will place the applicable Vehicle in good repair, condition and working order; provided, however, that if the applicable Vehicle is determined by Lessor to be lost, stolen, destroyed or damaged beyond repair (a "Totaled Vehicle"), Lessee agrees to pay Lessor no later than the date forty-five (45) days after the date of the Casualty Occurrence the amounts owed under Sections 3(b) and 3(c) with respect to such Totaled Vehicle. Upon such payment, this Agreement will terminate with respect to such Totaled Vehicle.

Section 14, second paragraph of the Master Equity Lease Agreement is amended to read as follows:

Upon the occurrence of any Event of Default, Lessor, shall provide written notice of Event of Default to Lessee. Lessee shall have ten (10) days (exclusive of Section 11, Insurance) upon receipt of notice to cure the Event of Default. Upon expiration of the ten (10) days without remedy of the Event of Default by the Lessee, Lessor, will have the right to exercise concurrently or separately (and without any election of remedies being deemed made), the following remedies: (a) Lessor may demand and receive immediate possession of any or all of the Vehicles from Lessee, without releasing Lessee from its obligations under this Agreement; if Lessee fails to surrender possession of the Vehicles to Lessor on default (or termination or expiration of the Term), Lessor, Servicer, any other agent of Lessor and any of Lessor's independent contractors shall have the right to enter upon any premises where the Vehicles may be located and to remove and repossess the Vehicles; (b) Lessor may enforce performance by Lessee of its obligations under this Agreement; (c) Lessor may recover damages and expenses sustained by Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns by reason of Lessee's default including, to the extent permitted by applicable law, all costs and expenses, including court costs and reasonable attorneys' fees and expenses, incurred by Lessor, Servicer, any other agent of Lessor or any of their respective successors or assigns in attempting or effecting enforcement of Lessor's rights under this Agreement (whether or not litigation is commenced) and/or in connection with bankruptcy or insolvency proceedings; (d) upon written notice to Lessee, Lessor may terminate Lessee's rights under this Agreement; (e) with respect to each Vehicle, Lessor may recover from Lessee all amounts owed by Lessee under Sections 3(b) and 3(c) of this Agreement (and, if Lessor does not recover possession of a Vehicle, (i) the estimated wholesale value of such Vehicle for purposes of Section 3(c) shall be deemed to be \$0.00 and (ii) the calculations described in the first two sentences of Section 3(c) shall be made without giving effect to clause (ii) in each such sentence); and/or (f) Lessor may exercise any other right or remedy which may be available to Lessor under the Uniform Commercial Code, any other applicable law or in equity. A termination of this Agreement shall occur only upon written notice by Lessor to Lessee. Any termination shall not affect Lessee's obligation to pay all amounts due for periods prior to the effective date of such termination or Lessee's obligation to pay any indemnities under this Agreement. All remedies of Lessor under this Agreement or at law or in equity are cumulative.

Additional Section 20 is added to the Master Equity Lease Agreement and reads as follows:

DISPUTE RESOLUTION: Any unresolved disputes arising out of this Agreement will be settled by binding arbitration at the office of the AAA located in Oklahoma. The arbitration will be held in accordance with the AAA Rules, as amended by this Agreement. Either party may initiate arbitration by providing written demand for arbitration (with a copy to the other party), a copy of this Agreement and the administrative fee required by the AAA Rules to the AAA in Oklahoma. The remaining cost of the arbitration, including arbitrator's fees, shall be shared equally by the parties unless the arbitration award provides otherwise. Each party shall bear the cost of preparing and presenting its case. The parties agree to undertake all of the submission of the demand for arbitration. The arbitrator shall designate the time and place in Oklahoma for the hearing within thirty (30) calendar days of his or her appointment. The arbitrator shall not be able to award, nor shall any party be entitled to receive punitive, incidental, consequential, exemplary, reliance or special damages, including damages for lost profits. The arbitrator's decision shall follow the plain meaning of the Agreement and shall be final, binding, and enforceable in a court of competent jurisdiction.

All references in the Agreement and in the various Schedules and addenda to the Agreement and any other references of similar import shall henceforth mean the Agreement as amended by this Amendment. Except to the extent specifically amended by this Amendment, all of the terms, provisions, conditions, covenants, representations and warranties contained in the Agreement shall be and remain in full force and effect and the same are hereby ratified and confirmed.

IN WITNESS WHEREOF, Lessor and Lessee have executed this Amendment to Master Equity Lease Agreement as of the day and year first above written.

City of Shawnee, Oklahoma (Lessee)

Enterprise FM Trust (Lessor)
By: Enterprise Fleet Management, Inc., its attorney in fact

By _____

By _____

Title: _____

Title: _____

Date Signed: _____, _____

Date Signed: _____, _____

Prepared For: City of Shawnee				Date 12/11/2024	
				AE/AM RA	
Unit #					
Year		2025	Make Dodge		Model Durango
Series		Pursuit 4dr All-Wheel Drive			
Vehicle Order Type	Ordered	Term 60	State OK	Customer# 512496	
\$ 42,072.00		Capitalized Price of Vehicle ¹			
\$1,321.82		*	Motor Vehicle Excise Tax <u>3.2500%</u> State <u>OK</u>		
\$ 111.75		Initial License Fee			
\$ 0.00		Registration Fee			
\$ 550.00		Other: (See Page 2)			
\$ 0.00		Capitalized Price Reduction			
\$ 0.00		Gain Applied From Prior Unit			
\$ 0.00		*	Security Deposit		
\$0.00		Taxes			
\$ 42,733.75		Total Capitalized Amount (Delivered Price)			
\$ 641.01		Depreciation Reserve @ <u>1.5000%</u>			
\$ 200.75		Monthly Lease Charge (Based on Interest Rate - Subject to a Floor) ²			
\$ 841.76		Total Monthly Rental Excluding Additional Services			
Additional Fleet Management					
Master Policy Enrollment Fees					
\$ 0.00		Commercial Automobile Liability Enrollment			
Liability Limit <u>\$0.00</u>					
\$ 0.00		Physical Damage Management		Comp/Coll Deductible	<u>0 / 0</u>
\$ 0.00		Full Maintenance Program ³ Contract Miles <u>0</u>		OverMileage Charge	<u>\$ 0.00</u> Per Mile
Incl: # Brake Sets (1 set = 1 Axle) <u>0</u>					
# Tires <u>0</u> Loaner Vehicle Not Included					
\$ 0.00		Additional Services SubTotal			
\$ 0.00		Tax <u>0.0000%</u>		State <u>OK</u>	
\$ 841.76		Total Monthly Rental Including Additional Services			
\$ 4,273.15		Reduced Book Value at <u>60</u> Months			
\$ 400.00		Service Charge Due at Lease Termination			

All language and acknowledgments contained in the signed quote apply to all vehicles that are ordered under this signed quote.

Order Information

Driver Name

Exterior Color DB Black Clearcoat

Interior Color Black w/Cloth Bucket Seats w/Shift Insert or

Lic. Plate Type Government

GVWR 0

All language and acknowledgments contained in the signed quote apply to all vehicles that are ordered under this signed quote.

Order Information

Driver Name

Exterior Color DB Black Clearcoat

Interior Color Black w/Cloth Bucket Seats w/Shift Insert or

Lic. Plate Type Government

GVWR 0

Quote based on estimated annual mileage of 15,000
 (Current market and vehicle conditions may also affect value of vehicle)
 (Quote is Subject to Customer's Credit Approval)
 Notes

Enterprise FM Trust will be the owner of the vehicle covered by this Quote. Enterprise FM Trust (not Enterprise Fleet Management) will be the Lessor of such vehicle under the Master Open - End (Equity) Lease Agreement and shall have all rights and obligations of the Lessor under the Master Open - End (Equity) Lease Agreement with respect to such vehicle. Lessee must maintain insurance coverage on the vehicle as set forth in Section 11 of the Master Open-End (Equity) Lease Agreement until the vehicle is sold.

ALL TAX AND LICENSE FEES TO BE BILLED TO LESSEE AS THEY OCCUR.
 Lessee hereby authorizes this vehicle order, and agrees to lease the vehicle on the terms set forth herein and in the Master Equity Lease Agreement. In the event Lessee fails or refuses to accept delivery of the ordered vehicle, Lessee agrees that Lessor shall have the right to collect damages, including, but not limited to, a \$500 disposal fee, interest incurred, and loss of value.

LESSEE City of Shawnee

BY

TITLE

DATE

* INDICATES ITEMS TO BE BILLED ON DELIVERY.

¹ Capitalized price of vehicle may be adjusted to reflect final manufacturer's invoice, plus a pre delivery interest charge. Lessee hereby assigns to Lessor any manufacturer rebates and/or manufacturer incentives intended for the Lessee, which rebates and/or incentives have been used by Lessor to reduce the capitalized price of the vehicle.

² Monthly lease charge will be adjusted to reflect the interest rate on the delivery date (subject to a floor).

³ The inclusion herein of references to maintenance fees/services are solely for the administrative convenience of Lessee. Notwithstanding the inclusion of such references in this [Invoice/Schedule/Quote], all such maintenance services are to be performed by Enterprise Fleet Management, Inc., and all such maintenance fees are payable by Lessee solely for the account of Enterprise Fleet Management, Inc., pursuant to that certain separate [Maintenance Agreement] entered into by and between Lessee and Enterprise Fleet Management, Inc.; provided that such maintenance fees are being billed by Enterprise FM Trust, and are payable at the direction of Enterprise FM Trust, solely as an authorized agent for collection on behalf of Enterprise Fleet Management, Inc.

Other Totals

Description	(B)illed or (C)apped	Price
Pricing Plan Delivery Charge	C	\$ 250.00
Courtesy Delivery Fee	C	\$ 300.00
Total Other Charges Billed		\$ 0.00
Total Other Charges Capitalized		\$ 550.00
Other Charges Total		\$ 550.00

VEHICLE INFORMATION:

2025 Dodge Durango Pursuit 4dr All-Wheel Drive - US

Series ID: WDEE75

Pricing Summary:

	INVOICE	MSRP
Base Vehicle	\$43,741	\$43,940.00
Total Options	\$676.00	\$750.00
Destination Charge	\$1,595.00	\$1,595.00
Total Price	\$46,012.00	\$46,285.00

SELECTED COLOR:

Exterior: PXJ-DB Black Clearcoat
Interior: X9-Black w/Cloth Bucket Seats w/Shift Insert or Cloth Bucket Seats w/Rear Vinyl

SELECTED OPTIONS:

CODE	DESCRIPTION	INVOICE	MSRP
2BZ	Quick Order Package 2BZ	NC	NC
APA	Monotone Paint Application	STD	STD
C5	Cloth Bucket Seats w/Shift Insert	STD	STD
DFT	Transmission: 8-Speed Automatic (850RE)	STD	STD
DLK	3.45 Rear Axle Ratio	STD	STD
ERC	Engine: 3.6L V6 24V VVT UPG I w/ESS	STD	STD
LNF	Black Left LED Spot Lamp	\$676.00	\$750.00
NAS	50 State Emissions	NC	NC
PXJ_02	DB Black Clearcoat	NC	NC
TXQ	Tires: 255/60R18 BSW On/Off Road	STD	STD
UAM	Radio: Uconnect 4 w/8.4" Display	STD	STD
WBN	Wheels: 18" x 8.0" Black Steel	STD	STD
X9_01	Black w/Cloth Bucket Seats w/Shift Insert or Cloth Bucket Seats w/Rear Vinyl	NC	NC
Z6K	GVWR: 6,500 lbs	STD	STD

CONFIGURED FEATURES:

Body Exterior Features:

Number Of Doors: 4
Rear Cargo Door Type: liftgate
Driver And Passenger Mirror: power remote heated manual folding side-view door mirrors
Spoiler: rear lip spoiler
Door Handles: body-coloured
Front And Rear Bumpers: body-coloured front and rear bumpers with coloured rub strip
Rear Step Bumper: rear step bumper
Body Material: galvanized steel/aluminum body material
: class IV trailering with harness, hitch
Grille: black grille

Convenience Features:

Air Conditioning: automatic dual-zone front air conditioning
Air Filter: air filter
Rear Air Conditioning: rear air conditioning with separate controls
Console Ducts: console ducts
Voice Activated A/C: voice activated air conditioning
Cruise Control: cruise control with steering wheel controls
Power Windows: power windows with driver and passenger 1-touch down
1/4 Vent Rear Windows: power rearmost windows
Remote Keyless Entry: keyfob (all doors) remote keyless entry
Illuminated Entry: illuminated entry
Integrated Key Remote: integrated key/remote
Auto Locking: auto-locking doors
Passive Entry: proximity key
Valet Key: valet function
Trunk FOB Controls: keyfob trunk/hatch/door release
Window FOB Controls: remote window controls
Steering Wheel: steering wheel with manual tilting, manual telescoping
Day-Night Rearview Mirror: day-night rearview mirror
Auto-dimming Rearview Mirror: auto-dimming rearview mirror
Driver and Passenger Vanity Mirror: driver and passenger-side visor mirrors
Front Cupholder: front and rear cupholders
Floor Console: partial floor console with covered box
Overhead Console: mini overhead console with storage
Glove Box: illuminated locking glove box
Driver Door Bin: driver and passenger door bins
Rear Door Bins: rear door bins
Driver Footrest: driver's footrest
Retained Accessory Power: retained accessory power
Power Accessory Outlet: 3 12V DC power outlets

Entertainment Features:

radio: SiriusXM AM/FM/HD/Satellite with seek-scan
Radio Data System: radio data system
Voice Activated Radio: voice activated radio
Speed Sensitive Volume: speed-sensitive volume
Steering Wheel Radio Controls: steering-wheel mounted audio controls
Speakers: 6 speakers
1st Row LCD: 2 1st row LCD monitor
Wireless Connectivity: wireless phone connectivity
Antenna: integrated roof antenna

Lighting, Visibility and Instrumentation Features:

Headlamp Type: delay-off projector beam LED low/high beam headlamps
Front Wipers: variable intermittent speed-sensitive wipers wipers
Rear Window wiper: fixed interval rear window wiper
Rear Window Defroster: rear window defroster

Tinted Windows: deep-tinted windows
Dome Light: dome light with fade
Front Reading Lights: front and rear reading lights
Door Curb/Courtesy Lights: 2 door curb/courtesy lights
Variable IP Lighting: variable instrument panel lighting
Display Type: digital/analog appearance
Tachometer: tachometer
Voltmeter: voltmeter
Compass: compass
Exterior Temp: outside-temperature display
Low Tire Pressure Warning: tire specific low-tire-pressure warning
Park Distance Control: ParkSense with Stop rear parking sensors
Trip Computer: trip computer
Trip Odometer: trip odometer
Blind Spot Sensor: blind spot
Oil Pressure Gauge: oil pressure gauge
Water Temp Gauge: water temp. gauge
Oil Temp Gauge: oil temperature gauge
Transmission Oil Temp Gauge: transmission oil temp. gauge
Engine Hour Meter: engine hour meter
Clock: in-radio display clock
Systems Monitor: driver information centre
Check Control: redundant digital speedometer
Rear Vision Camera: rear vision camera
Oil Pressure Warning: oil-pressure warning
Water Temp Warning: water-temp. warning
Battery Warning: battery warning
Lights On Warning: lights-on warning
Low Fuel Warning: low-fuel warning
Low Washer Fluid Warning: low-washer-fluid warning
Bulb Failure Warning: bulb-failure warning
Door Ajar Warning: door-ajar warning
Trunk Ajar Warning: trunk-ajar warning
Brake Fluid Warning: brake-fluid warning
Turn Signal On Warning: turn-signal-on warning
Transmission Fluid Temperature Warning: transmission-fluid-temperature warning

Safety And Security:

ABS four-wheel ABS brakes
Number of ABS Channels: 4 ABS channels
Brake Assistance: brake assist
Brake Type: four-wheel disc brakes
Vented Disc Brakes: front and rear ventilated disc brakes
Daytime Running Lights: daytime running lights
Spare Tire Type: compact spare tire
Spare Tire Mount: underbody mounted spare tire w/crankdown
Driver Front Impact Airbag: driver and passenger front-impact airbags
Driver Side Airbag: seat-mounted driver and passenger side-impact airbags
Overhead Airbag: curtain 1st, 2nd and 3rd row overhead airbag
Knee Airbag: knee airbag
Occupancy Sensor: front passenger airbag occupancy sensor
Height Adjustable Seatbelts: height adjustable front seatbelts
Seatbelt Pretensioners: front seatbelt pre-tensioners
3Point Rear Centre Seatbelt: 3 point rear centre seatbelt
Side Impact Bars: side-impact bars
Perimeter Under Vehicle Lights: remote activated perimeter/approach lights
Tailgate/Rear Door Lock Type: tailgate/rear door lock included with power door locks
Rear Child Safety Locks: rear child safety locks
Ignition Disable: Sentry Key immobilizer
Panic Alarm: panic alarm

Electronic Stability: electronic stability stability control with anti-rollover
Traction Control: ABS and driveline traction control
Front and Rear Headrests: manual adjustable front head restraints with tilt
Rear Headrest Control: 3 rear head restraints
Break Resistant Glass: break resistant glass

Seats And Trim:

Seating Capacity max. seating capacity of 5
Front Bucket Seats: front bucket seats
Number of Driver Seat Adjustments: 8-way driver and passenger seat adjustments
Reclining Driver Seat: power reclining driver and manual reclining passenger seats
Driver Lumbar: power 4-way driver and passenger lumbar support
Driver Height Adjustment: power height-adjustable driver and passenger seats
Driver Fore/Aft: power driver and passenger fore/aft adjustment
Driver Cushion Tilt: power driver and passenger cushion tilt
Fold Flat Passenger Seat: fold flat passenger seat
Front Centre Armrest Storage: front centre armrest with storage
Rear Seat Type: rear 60-40 split-bench seat
Rear Folding Position: rear seat fold-forward seatback
Rear Seat Armrest: rear seat centre armrest
Leather Upholstery: cloth front and rear seat upholstery
Headliner Material: full cloth headliner
Floor Covering: full vinyl/rubber floor covering
Dashboard Console Insert, Door Panel Insert Combination: leatherette/metal-look instrument panel insert, door panel insert, console insert
LeatherSteeringWheel: leather steering wheel
Interior Accents: chrome interior accents
Cargo Space Trim: carpet cargo space
Trunk Lid: plastic trunk lid/rear cargo door
Cargo Tie Downs: cargo tie-downs
Cargo Light: cargo light
Concealed Cargo Storage: concealed cargo storage

Standard Engine:

Engine 293-hp, 3.6-liter V-6 (regular gas)

Standard Transmission:

Transmission 8-speed automatic w/ OD and auto-manual

Prepared For: City of Shawnee				Date 12/11/2024	
				AE/AM RA	
Unit #					
Year		2025	Make		RAM Model 1500
Series		Tradesman 4x4 Crew Cab 144.5 in. WB			
Vehicle Order Type	Ordered	Term 60	State OK	Customer# 512496	
\$ 43,934.00		Capitalized Price of Vehicle ¹			
\$1,378.32		*	Motor Vehicle Excise Tax <u>3.2500%</u> State <u>OK</u>		
\$ 111.75		Initial License Fee			
\$ 0.00		Registration Fee			
\$ 550.00		Other: (See Page 2)			
\$ 0.00		Capitalized Price Reduction			
\$ 0.00		Gain Applied From Prior Unit			
\$ 0.00		*	Security Deposit		
\$0.00		Taxes			
\$ 44,595.75		Total Capitalized Amount (Delivered Price)			
\$ 602.04		Depreciation Reserve @ <u>1.3500%</u>			
\$ 222.77		Monthly Lease Charge (Based on Interest Rate - Subject to a Floor) ²			
\$ 824.81		Total Monthly Rental Excluding Additional Services			
Additional Fleet Management					
Master Policy Enrollment Fees					
\$ 0.00		Commercial Automobile Liability Enrollment			
Liability Limit <u>\$0.00</u>					
\$ 0.00		Physical Damage Management		Comp/Coll Deductible	<u>0 / 0</u>
\$ 0.00		Full Maintenance Program ³ Contract Miles <u>0</u>		OverMileage Charge	<u>\$ 0.00</u> Per Mile
Incl: # Brake Sets (1 set = 1 Axle) <u>0</u>				# Tires <u>0</u>	Loaner Vehicle Not Included
\$ 0.00		Additional Services SubTotal			
\$ 0.00		Tax	<u>0.0000%</u>	State <u>OK</u>	
\$ 824.81		Total Monthly Rental Including Additional Services			
\$ 8,473.35		Reduced Book Value at <u>60</u> Months			
\$ 400.00		Service Charge Due at Lease Termination			

All language and acknowledgments contained in the signed quote apply to all vehicles that are ordered under this signed quote.

Order Information

Driver Name	
Exterior Color	Diamond Black Crystal Pearlcoat
Interior Color	Black w/Cloth Bench Seat
Lic. Plate Type	Government
GVWR	0

Quote based on estimated annual mileage of 15,000
(Current market and vehicle conditions may also affect value of vehicle)
(Quote is Subject to Customer's Credit Approval)
Notes

Enterprise FM Trust will be the owner of the vehicle covered by this Quote. Enterprise FM Trust (not Enterprise Fleet Management) will be the Lessor of such vehicle under the Master Open - End (Equity) Lease Agreement and shall have all rights and obligations of the Lessor under the Master Open - End (Equity) Lease Agreement with respect to such vehicle. Lessee must maintain insurance coverage on the vehicle as set forth in Section 11 of the Master Open-End (Equity) Lease Agreement until the vehicle is sold.

ALL TAX AND LICENSE FEES TO BE BILLED TO LESSEE AS THEY OCCUR.
Lessee hereby authorizes this vehicle order, and agrees to lease the vehicle on the terms set forth herein and in the Master Equity Lease Agreement. In the event Lessee fails or refuses to accept delivery of the ordered vehicle, Lessee agrees that Lessor shall have the right to collect damages, including, but not limited to, a \$500 disposal fee, interest incurred, and loss of value.

LESSEE City of Shawnee		
BY	TITLE	DATE

* INDICATES ITEMS TO BE BILLED ON DELIVERY.
¹ Capitalized price of vehicle may be adjusted to reflect final manufacturer's invoice, plus a pre delivery interest charge. Lessee hereby assigns to Lessor any manufacturer rebates and/or manufacturer incentives intended for the Lessee, which rebates and/or incentives have been used by Lessor to reduce the capitalized price of the vehicle.
² Monthly lease charge will be adjusted to reflect the interest rate on the delivery date (subject to a floor).
³ The inclusion herein of references to maintenance fees/services are solely for the administrative convenience of Lessee. Notwithstanding the inclusion of such references in this [Invoice/Schedule/Quote], all such maintenance services are to be performed by Enterprise Fleet Management, Inc., and all such maintenance fees are payable by Lessee solely for the account of Enterprise Fleet Management, Inc., pursuant to that certain separate [Maintenance Agreement] entered into by and between Lessee and Enterprise Fleet Management, Inc.; provided that such maintenance fees are being billed by Enterprise FM Trust, and are payable at the direction of Enterprise FM Trust, solely as an authorized agent for collection on behalf of Enterprise Fleet Management, Inc.

Other Totals

Description	(B)illed or (C)apped	Price
Pricing Plan Delivery Charge	C	\$ 250.00
Courtesy Delivery Fee	C	\$ 300.00
Total Other Charges Billed		\$ 0.00
Total Other Charges Capitalized		\$ 550.00
Other Charges Total		\$ 550.00

VEHICLE INFORMATION:

2025 RAM 1500 Tradesman 4x4 Crew Cab 144.5 in. WB - US

Series ID: DT6L98

Pricing Summary:

	INVOICE	MSRP
Base Vehicle	\$45,094	\$46,875.00
Total Options	\$1,785.00	\$1,940.00
Destination Charge	\$1,995.00	\$1,995.00
Total Price	\$48,874.00	\$50,810.00

SELECTED COLOR:

Exterior:	PXJ-Diamond Black Crystal Pearlcoat
Interior:	X9-Black w/Cloth Bench Seat

SELECTED OPTIONS:

CODE	DESCRIPTION	INVOICE	MSRP
23A	Quick Order Package 23A Tradesman	NC	NC
A61	Tradesman Level 1 Equipment Group	\$1,560.00	\$1,695.00
APA	Monotone Paint	STD	STD
CB9	2nd Row In Floor Storage Bins	Included	Included
CBE	40/20/40 Split Bench Seat	Included	Included
CDP	4 Way Front Headrests	Included	Included
CFN	Rear 60/40 Folding Seat	Included	Included
CLE	Front & Rear Floor Mats	Included	Included
CSH	3 Rear Seat Head Restraints	Included	Included
CSM	Front Seat Back Map Pockets	Included	Included
CVH	Front Center Seat Cushion Storage	Included	Included
DFT	Transmission: 8-Speed Automatic (850RE)	STD	STD
DMC	3.21 Rear Axle Ratio	STD	STD
E1	Cloth Bench Seat	Included	Included
ERG	Engine: 3.6L V6 24V VVT eTorque UPG I	STD	STD
GFE	Rear Power Sliding Window	Included	Included
JVA	Manual Adjust 4-Way Driver Seat	Included	Included
JWA	Manual Adjust 4-Way Front Passenger Seat	Included	Included
NAS	50 State Emissions	NC	NC
PXJ_02	Diamond Black Crystal Pearlcoat	\$225.00	\$245.00
RSD	SiriusXM Satellite Radio	Included	Included
TUM	Tires: 275/65R18 BSW All Season LRR	STD	STD
UBE	Radio: Uconnect 5 W w/8.4" Display	STD	STD
WBF	Wheels: 18" x 7.5" Steel Painted	STD	STD
X78	Seat Parts Module II	Included	Included
X9_01	Black w/Cloth Bench Seat	NC	NC
Z6B	GVWR: 6,900 lbs	STD	STD

CONFIGURED FEATURES:

Body Exterior Features:

Number Of Doors: 4
Rear Cargo Door Type: tailgate
Driver And Passenger Mirror: power remote heated manual folding side-view door mirrors
Convex Driver Mirror: convex driver and passenger mirror
Door Handles: black
Front And Rear Bumpers: black front and rear bumpers with black rub strip
Rear Step Bumper: rear step bumper
Box Style: regular
Body Material: galvanized steel/aluminum body material
: class IV trailering with harness, hitch
Grille: black grille

Convenience Features:

Air Conditioning: manual air conditioning
Air Filter: air filter
Console Ducts: console ducts
Cruise Control: cruise control with steering wheel controls, adaptive
Power Windows: power windows with driver and passenger 1-touch down
Remote Keyless Entry: keyfob (all doors) remote keyless entry
Illuminated Entry: illuminated entry
Integrated Key Remote: integrated key/remote
Auto Locking: auto-locking doors
Passive Entry: proximity key
Valet Key: valet function
Remote Engine Start: remote start - keyfob and smart device (subscription required)
Steering Wheel: steering wheel with manual tilting, manual telescoping
Day-Night Rearview Mirror: day-night rearview mirror
Emergency SOS: RAM Connect
Voice Recorder: voice recorder
Front Cupholder: front and rear cupholders
Overhead Console: mini overhead console with storage
Glove Box: locking glove box
Driver Door Bin: driver and passenger door bins
Rear Door Bins: rear door bins
Seatback Storage Pockets: 2 seatback storage pockets
Dashboard Storage: dashboard storage
Interior Concealed Storage: interior concealed storage
IP Storage: covered bin instrument-panel storage
Front Underseat Storage Tray: front underseat storage tray
Driver Footrest: driver's footrest
Retained Accessory Power: retained accessory power
Power Accessory Outlet: 1 12V DC power outlet

Entertainment Features:

radio: SiriusXM AM/FM/Satellite-prep with seek-scan
Radio Data System: radio data system
Voice Activated Radio: voice activated radio
Speed Sensitive Volume: speed-sensitive volume
Speakers: 6 speakers
Internet Access: 4G LTE Wi-Fi Hot Spot internet access
1st Row LCD: 2 1st row LCD monitor
Wireless Connectivity: wireless phone connectivity
Antenna: fixed antenna

Lighting, Visibility and Instrumentation Features:

Headlamp Type: delay-off reflector LED low/high beam headlamps
Auto-Dimming Headlights: auto high-beam headlights
Cab Clearance Lights: cargo bed light

Front Wipers: variable intermittent wipers
Rear Window: power rear windshield
Tinted Windows: deep-tinted windows
Dome Light: dome light with fade
Front Reading Lights: front reading lights
Variable IP Lighting: variable instrument panel lighting
Display Type: analog appearance
Tachometer: tachometer
Voltmeter: voltmeter
Compass: compass
Exterior Temp: outside-temperature display
Low Tire Pressure Warning: tire specific low-tire-pressure warning
Park Distance Control: ParkSense front and rear parking sensors
Trip Odometer: trip odometer
Lane Departure Warning: lane departure
Blind Spot Sensor: blind spot
Front Pedestrian Braking: front pedestrian detection
Following Distance Indicator: following distance alert
Forward Collision Alert: forward collision
Oil Pressure Gauge: oil pressure gauge
Water Temp Gauge: water temp. gauge
Oil Temp Gauge: oil temperature gauge
Transmission Oil Temp Gauge: transmission oil temp. gauge
Engine Hour Meter: engine hour meter
Clock: in-radio display clock
Systems Monitor: driver information centre
Rear Vision Camera: rear vision camera
Oil Pressure Warning: oil-pressure warning
Water Temp Warning: water-temp. warning
Lights On Warning: lights-on warning
Key in Ignition Warning: key-in-ignition warning
Low Fuel Warning: low-fuel warning
Low Washer Fluid Warning: low-washer-fluid warning
Bulb Failure Warning: bulb-failure warning
Door Ajar Warning: door-ajar warning
Trunk Ajar Warning: trunk-ajar warning
Brake Fluid Warning: brake-fluid warning
Transmission Fluid Temperature Warning: transmission-fluid-temperature warning

Safety And Security:

ABS four-wheel ABS brakes
Number of ABS Channels: 4 ABS channels
Brake Assistance: brake assist
Brake Type: four-wheel disc brakes
Vented Disc Brakes: front ventilated disc brakes
Daytime Running Lights: daytime running lights
Spare Tire Type: full-size spare tire
Spare Tire Mount: underbody mounted spare tire w/crankdown
Driver Front Impact Airbag: driver and passenger front-impact airbags
Driver Side Airbag: seat-mounted driver and passenger side-impact airbags
Overhead Airbag: curtain 1st and 2nd row overhead airbag
Occupancy Sensor: front passenger airbag occupancy sensor
Height Adjustable Seatbelts: height adjustable front seatbelts
Seatbelt Pretensioners: front seatbelt pre-tensioners
3Point Rear Centre Seatbelt: 3 point rear centre seatbelt
Side Impact Bars: side-impact bars
Perimeter Under Vehicle Lights: remote activated perimeter/approach lights
Tailgate/Rear Door Lock Type: tailgate/rear door lock included with power door locks
Rear Child Safety Locks: rear child safety locks
Ignition Disable: Sentry Key immobilizer

Panic Alarm: panic alarm
Electronic Stability: electronic stability stability control with anti-rollover
Traction Control: ABS and driveline traction control
Front and Rear Headrests: manual adjustable front head restraints with tilt
Rear Headrest Control: 3 rear head restraints
Break Resistant Glass: break resistant glass

Seats And Trim:

Seating Capacity max. seating capacity of 6
Front Bucket Seats: front split-bench 40-20-40 seats
Number of Driver Seat Adjustments: 4-way driver and passenger seat adjustments
Reclining Driver Seat: manual reclining driver and passenger seats
Driver Fore/Aft: manual driver and passenger fore/aft adjustment
Front Centre Armrest Storage: front centre armrest
Rear Seat Type: rear 60-40 split-bench seat
Rear Folding Position: rear seat fold-up cushion
Leather Upholstery: cloth front and rear seat upholstery
Headliner Material: full cloth headliner
Floor Covering: full carpet floor covering
Deluxe Sound Insulation: deluxe sound insulation
Dashboard Console Insert, Door Panel Insert Combination: metal-look instrument panel insert, door panel insert, console insert
Shift Knob Trim: urethane shift knob
Floor Mats: carpet front and rear floor mats
Interior Accents: chrome/metal-look interior accents

Standard Engine:

Engine 305-hp, 3.6-liter V-6 (regular gas)

Standard Transmission:

Transmission 8-speed automatic w/ OD and auto-manual



Engineering Department
222 N. Broadway Ave.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: Seth Barkhimer, Director of Engineering
Subject: Approval of a Task Order in accordance with the agreement between the City of Shawnee and Cowan Group Engineering, LLC for Water System Improvements along Walnut Street.

Background: On September 9, 2022, Engineering and Public Works briefed the City Commission on multiple projects for which American Rescue Plan Act (ARPA) Funding would be used. This new task order includes the removal and replacement of existing water mains along Walnut Street, South Osage Avenue and Main Street. The project also includes the extension of new water main along Walnut Street to create a loop to South Bryan Avenue. A visual of the project scope is attached to the task order. This project has been outlined as a high priority, and was included in the amendment to the Capital Improvement Plan in December of 2024, when it was moved up from FY 2027 to FY 2025.

Cowan Group Engineering, LLC has been selected for this design, and their task order is for \$138,000. The project scope includes:

- Survey
- Preliminary and Final Design
- Bidding
- Limited Construction Administration

Staff is seeking approval from the City Commission for the proposed task order and authorization for the City Manager to execute the necessary contractual documentation.

Financial Impact: \$138,000; funded from American Rescue Plan Fund - Capital Outlay-Buildings & Improvements, 304-5-1040-54200; Proj. No. 24-1040-03

Attachments: Walnut Street Waterline Replacement - Proposal 241114

Staff Recommendation: Approval of the item

TASK ORDER FORM

Task Order

In accordance with the Proposal Agreement between Owner and Consultant for Professional Services, dated _____, 2024 ("Agreement"), Owner and Consultant agree as follows:

1. Background Data

- a. Effective Date of Task Order: _____
- b. Owner: City of Shawnee/Shawnee Municipal Authority
- c. Consultant: Cowan Group Engineering, LLC
- d. Specific Project (title): Walnut Street Waterline Replacement
- e. Specific Project (description): The basic scope of services includes the topographic survey, boundary retracement, and engineering planning and design for a new waterline to replace aging waterlines. The project includes approximately 2,300 LF of 8- inch waterline replacements. The conceptual plan of the project is defined in Attachment "A" and the preliminary engineering construction cost estimate is in Attachment "B".

2. Services of Consultant

- A. The specific services to be provided or furnished by Consultant under this Task Order are:

Phase 1 – Land Survey

- Retrace property boundaries.
- Call OKIE locates and survey located features.
- Land survey to verify horizontal control, vertical control, land ties according Oklahoma State Plane coordinate system. Provide primary and secondary project control based on available NGS monumentation and/or ties to NGS CORS/OPUS. Project horizontal datum will be NAD1983 projected on Oklahoma State Plane Coordinates South Zone.
- Field topographic land survey for surface features including: buildings, roads, railroads, drainage features, bridges, culverts, fences, driveways, poles, sidewalks, edge of tree groupings, fire hydrants, manholes, catch basins, existing utilities, etc. Locate above-ground natural and man-made features, including fences, and drainage structures. Existing underground utilities will be shown based upon available records and Call-Okie locates.
- Provide a grid of ground points along with break lines will be collected for the purpose of creating a digital terrain model (DTM) and provide contours at 1-foot intervals from the DTM data.
- Set and identify four (4) benchmarks relative to NAVD 88 for vertical control.
- Contact and locate each privately-owned Utility.
- Coordinate underground piping locations and provide a detailed drawing for each pipe to include, but not limited to, depth, size, type, surveyed location of findings.

Phase 2 – Preliminary Design

- Incorporate approved conceptual alignment into preliminary construction drawings.
- Prepare preliminary waterline design.
- Coordinate existing utilities and applicable extensions.
- Prepare contract documents and specifications.
- Prepare preliminary cost estimate.
- Deliver three (3) hard copy drawings (11x17) and contract documents, and electronic PDF format.
- Prepare and deliver construction drawings to utility companies. Coordinate with the City and utility companies. Attend one (1) utility conference meeting to review preliminary construction drawings and coordinate schedules.
- Attend one (1) review meeting with Owner and Stakeholders.

Phase 3 – Final Design

- Incorporate comments into final construction drawings.
- Construction drawings shall include, but not limited to the final construction drawing sheets:
 - Cover Sheet
 - Pay Quantities and Notes
 - Survey Data
 - Plan and Profiles
 - Standard Details
 - Special Details
 - Erosion Control
- Prepare contract documents and specifications for one (1) base bid.
- Prepare final construction cost estimate.
- Prepare engineering report per Oklahoma Department of Environmental Quality (ODEQ).
- Prepare and submit ODEQ permits and applications.
- Coordinate utility services and extensions.
- Prepare individual legal descriptions and exhibits for temporary and permanent easements for required parcels (\$750 per parcel).
- Deliver three (3) hard copy drawings (11x17) and contract documents, and electronic PDF format.
- Attend one (1) review meeting with Owner and Stakeholders.

Phase 4 – Bidding

- Finalize the construction drawings and contract documents into one (1) bid package.
- Coordinate bid advertisement.
- Attend pre-bid meeting (as required).
- Prepare addendums (as required).
- Prepare bid tabulations and review with Owner and make recommendation.
- Assist in preparation agreement with selected Contractor for Owner/Contractor execution.
- Issue notice to proceed to Contractor with Owner approval.

Phase 5 – Construction Administration

- Attend pre-work meeting.
- Review and approval of submittals.
- Address request for information from Contractor.
- Review, process and approve pay applications for Owner approval.
- Prepare record drawings.
- Participate in bi-weekly meetings. (80 Hours Maximum).
- Conduct one (1) final inspection, acceptance, and report.

ADDITIONAL SERVICES

Other services that are not associated with the agreed Scope of Services shall be considered as additional services. Additional services would include Owner directed work that is clearly outside of the base contract. The fee structure for additional services shall be based on time and expense effort unless otherwise negotiated prior to services being rendered. See Attachment "B". Additional services may include the following, but not limited to:

- **Plan Revisions**
 - **Plan revisions (minor alterations) are expected and therefore are included as part of our services in the base contract. Although, if plan adjustments exceed normal revisions or if a complete redesign is required then additional services shall be negotiated to meet an adjusted scope of services. Agency plan review comments are not included as part of minor revisions to plan documents.**
- **Water or wastewater modeling**
- **Phase I environmental study and clearance**
- **Right of way or easement acquisitions or staking**
- **Permit fees for City, County or State**
- **Construction staking**

3. Task Order Schedule

In addition to any schedule provisions provided, the parties shall meet the following schedule:

- Notice to Proceed – December 15, 2024
- Land Survey (30 days) – January 14, 2024
- Preliminary Design (90 days) – April 14, 2025
- Final Design (30 days) – May 14, 2025

4. Payments to Consultant

- A. Owner shall pay Consultant for services rendered under this Task Order as follows:

Task Order Fee Structure

Phase	SCOPE OR SERVICE DESCRIPTION	FEE
1	Land Survey	\$12,500
2	Preliminary Design	\$57,000
3	Final Design	\$36,000
4	Bidding	\$6,500
5	Construction Administration	\$26,000
6	Resident Project Representative	TBD
Total:		\$138,000

Compensation

For Basic Services performed under this specific Task Order Number 7, the Owner shall pay the Consultant a lump sum amount of **\$138,000**, including reimbursable expenses.

- B. The terms of payment are set forth in the Proposal Agreement.

The Effective Date of this Task Order is _____.

OWNER:

CONSULTANT:

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____


Jeff Cowart
CEO

City of Shawnee Web Print





COWAN GROUP ENGINEERING
 7100 N CLASSEN, SUITE 500
 OKLAHOMA CITY, OK 73116
 405.463.3369 O
 405.463.3381 F



PROJECT NAME WALNUT STREET WATERLINE REPLACEMENT
DESCRIPTION WATERLINE REPLACEMENT
LOCATION SHAWNEE, OK
PHASE CONCEPTUAL ESTIMATE
DATE 11/12/2024

ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
BASE BID					
1	MOBILIZATION	1	LS	\$ 50,000.00	\$ 50,000.00
2	CLEARING AND GRUBBING	1	LS	\$ 25,000.00	\$ 25,000.00
3	8" HDPE PIPE BY TRENCHING	1835	LF	\$ 100.00	\$ 183,500.00
4	8" HDPE PIPE BY HORIZONTAL DIRECTIONAL DRILLING	2080	LF	\$ 120.00	\$ 249,600.00
5	8" X 8" TAPPING SLEEVE W/ VALVE & BOX	1	EA	\$ 8,000.00	\$ 8,000.00
6	6" X 6" TAPPING SLEEVE W/ VALVE & BOX	7	EA	\$ 6,000.00	\$ 42,000.00
7	4" X 4" TAPPING SLEEVE W/ VALVE & BOX	2	EA	\$ 5,000.00	\$ 10,000.00
8	8" X 8" TEE	3	EA	\$ 2,000.00	\$ 6,000.00
9	8" X 6" TEE	8	EA	\$ 1,800.00	\$ 14,400.00
10	8" 90-DEGREE BEND	9	EA	\$ 800.00	\$ 7,200.00
11	8" 45-DEGREE BEND	4	EA	\$ 600.00	\$ 2,400.00
12	8" X 6" REDUCER	7	EA	\$ 1,500.00	\$ 10,500.00
13	8" X 4" REDUCER	2	EA	\$ 1,000.00	\$ 2,000.00
14	FIRE HYDRANT ASSEMBLY	8	EA	\$ 6,000.00	\$ 48,000.00
15	REMOVE & REPLACE ASPHALT PAVEMENT	200	SY	\$ 300.00	\$ 60,000.00
16	REMOVE & REPLACE CONCRETE DRIVE	50	SY	\$ 400.00	\$ 20,000.00
17	REMOVE & REPLACE GRAVEL DRIVE	20	SY	\$ 120.00	\$ 2,400.00
18	SOLID SLAB SOD	1324	SY	\$ 15.00	\$ 19,860.00
19	PRESSURE AND LEAKAGE TESTING	1	LS	\$ 6,000.00	\$ 6,000.00
20	DISINFECTION AND TESTING	1	LS	\$ 5,000.00	\$ 5,000.00
21	TRAFFIC CONTROL AND SIGNAGE	1	LS	\$ 5,000.00	\$ 5,000.00
22	TEMPORARY EROSION CONTROL	1	LS	\$ 5,000.00	\$ 5,000.00
BASE BID TOTAL					\$ 781,860.00
CONTINGENCY (20%)					\$ 156,372.00
CONSTRUCTION TOTAL					\$ 938,232.00



Proclamation

“School Board Appreciation Month”

Whereas, the foundation of a prosperous and enlightened city rests upon the pillars of education; and

Whereas, the tireless commitment and dedication of school board members positively contributes to the shaping of educational opportunity; and

Whereas, the decisions made by school board members have a profound impact on the lives of students, teachers, and families, fostering an environment that embraces learning and growth; and

Whereas, January 2025 has been designated as School Board Appreciation Month, providing a moment to express gratitude for the extraordinary service of these individuals; and

Whereas, recognizing School Board Appreciation Month encourages a culture of appreciation within the community for the vital role played by school boards.

Now, therefore I, Eric Stephens, Mayor of the City of Shawnee, Oklahoma by the authority vested in me, do hereby proclaim January 2025 to be

“School Board Appreciation Month”

I call upon all citizens to join in acknowledging the invaluable contributions of our school board members and to express gratitude for their commitment to the betterment of education in our great City.

In the City of Shawnee, Oklahoma
Dated this 21st day of January, 2025

Eric Stephens, Mayor

Lisa Lasyone, MMC, City Clerk



Proclamation

“United Acts of Kindness Day”

WHEREAS, Random Acts of Kindness week is recognized one week each February as an annual tradition of performing acts of kindness; and

WHEREAS, Millions of Americans focus together to change the world, one act of kindness at a time; and

WHEREAS, First United is seeking to complete 1,000,000 acts of kindness in one day through the help and generosity of their employees, partnering organizations like local area businesses, non-profits, community leaders, and churches, and other members of the Shawnee community; and

WHEREAS, United Acts of Kindness Day will inspire people in our community to come together to spread joy, hope, and love to friends, family, co-workers, and neighbors of Shawnee and spread a light of hope in the world and spark a revolution of kindness.

WHEREAS, United Acts of Kindness Day positively impacts lives by extending love and allows us to be more kind.

Now, therefore, I, Eric Stephens, Mayor of the City of Shawnee, Oklahoma, by the authority vested in me, do hereby proclaim this 14th day of February, 2025, to be

“United Acts of Kindness Day”

In the City of Shawnee, Oklahoma
Dated this 21st day of January, 2025

Eric Stephens, Mayor

Lisa Lasyone, MMC, City Clerk



Fire Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: James Kriwanek, Fire Chief
Subject: Consideration of a Change Order with Conrad Fire Equipment from a Commercial Rescue Vehicle to a Light Duty Rescue Vehicle.

Background: On July 15, 2024, the City Commission approved the purchase a commercial rescue vehicle for the Shawnee Fire Department to replace an older commercial rescue vehicle, "Squad 1."

While working with the company from which the vehicle was purchased, City staff learned of a more viable option that would better suit the needs of the City of Shawnee and the Fire Department. The resulting change order would generate a savings of \$111,692.07.

Financial Impact: Savings of \$111,692.07; returned to Capital Improvement Fund, Capital Outlay-Equipment, 301-5-0720-54500

Attachments: App Change Order - SHAWNEE OK BID#2352 (002)

Staff Recommendation: Approval of the item



Apparatus Change Order

Customer Name: **SHAWNEE, OK**

Sales Rep: **STEVE MARTIN**

Submitted Date: **1/8/25**

Expiration Date: **2/28/25**

Apparatus Change Order Detail

Qty.	Description	Price
1	FORD SKEETER RESCUE	\$ 325,859.98

Proposal Bid No.: **2352**

Proposal Doc Date: **11/20/24**

Performance Bond: **NO**

Warranty Period: **Standard**

Estimated Build Time: **22 MO**

Change Order Costs

Original Order (with Pre-Payment Discount)

Apparatus Purchase Price	\$ 439,484.35
Trade-in Value	\$ 0.00
Price After Trade-in	\$ 439,484.35
Pre-Payment Discount	-\$ 3,924.29
Extrication Rescue Tools	\$ 0.00
Loose Equipment	\$ 0.00
Options	\$ 0.00
Due Upon Order	\$ 435,560.06

Change Order (with Pre-Payment Discount)

Apparatus Purchase Price	\$ 325,859.98
Trade-in Value	\$ 0.00
Price After Trade-in	\$ 325,859.98
Pre-Payment Discount	-\$ 2,852.01
Extrication Rescue Tools	\$ 0.00
Loose Equipment	\$ 860.02
Options	\$ 0.00
Due Upon Delivery	\$ 323,867.99

Payment Terms

PRICING IS BASED ON FULL PAYMENT HAVING BEEN MADE AT TIME OF ORDER. A CREDIT/REFUND EQUAL TO THE DIFFERENCE OF THE PRE-PAYMENT OF \$435,560.06 FOR BID#811 AND THE FINAL PRICE OF BID#2352 AS DELIVERED WILL BE ISSUED TO THE CUSTOMER.

Notes

RELATED TO PO:25-0558, THE ATTACHED SKEETER BID#2352 SPECIFICATIONS CONSTITUTES A CHANGE ORDER TO THE ORIGINAL SKEETER BID#811 SPECIFICATIONS, THE CHANGES OF WHICH ARE BEING MADE UNDER HGAC CONTRACT NUMBER FS12-23. ABOVE REFERENCED LOOSE EQUIPMENT IS IN REFERENCE TO ATTACHED QUOTE 152548 TO BE INCLUDED WITH THIS SALE.

NOTE: Pre-payment discounts quoted may vary based on final purchase price, prevailing interest rates, and manufacturing build time and are subject to change up to the time an order is placed. If deferred payment arrangements are required, the Customer must make such financial arrangements through a financial institution acceptable to Company.] All taxes, excises and levies that Company may be required to pay or collect by reason of any present or future law or by any governmental authority based upon the sale, purchase, delivery, storage, processing, use, consumption, or transportation of the Product sold by Company to the Customer shall be for the account of the Customer and shall be added to the Purchase Price. All delivery prices or prices with freight allowance are based upon prevailing freight rates and, in the event of any increase or decrease in such rates, the prices on all unshipped Product will be increased or decreased accordingly. Delinquent payments shall be subject to a carrying charge of 1.5 percent per month or such lesser amount permitted by law. Company will not be required to accept payment other than as set forth in this Agreement. Company shall have and retain a purchase money security interest in all goods and products now or hereafter sold to the Customer by Company or any of its affiliated companies to secure payment of the Purchase Price for all such goods and products. In the event of nonpayment by the Customer of any debt, obligation or liability now or hereafter incurred or owing by the Customer to Company, Company shall have and may exercise all rights and remedies of a secured party under Article 9 of the Uniform Commercial Code (UCC) as adopted by the state of [KANSAS].



Spec # 2352 Print List

Spec #: 2352	Dealership: Conrad Fire Equipment	Chassis: C-4434 (Ford F550 - 4x4 - Diesel - EXT Cab 84" CA)
Job #:	Sales Rep: Steve Martin	Body:
Creation Date: 11/20/2024	Account: Shawnee Fire Department	Truck Desc.:
Notes:		NWCG Typing:

Components

#	Component Description	Category	Quantity
C-4434	Ford F550 - 4x4 - Diesel - EXT Cab 84" CA	Chassis	1
C-4137	84" Cab to Axle	Chassis	1
C-4418	Paint OEM Stock Color	Rescue Chassis	1
C-4786	Cab Steps - Ford Super Cab	Rescue Chassis	1
C-4508	Tires/Wheels - OEM Tires and Wheels	Rescue Chassis	1
C-3493	Front Bumper - Ranchhand Steel - Powdercoat Black	Chassis	1
C-4806	Winch Power Plugs, 12V, Quick Disconnect	Rescue Chassis	1
C-4511	Console, Alum/Poly, SM Truck	Rescue Chassis	1
C-4811	Power Outlet 12V, Cigarette Lighter Type, Cab	Rescue Chassis	1
C-4812	Console - Upgraded Fuse Block	Rescue Chassis	1
C-4814	Cab Poly - EMS Cabinet - Half 2nd Row	Rescue Chassis	2
C-3534	Radio Install - 2 Radios (Customer Provided)	Chassis	1
C-3536	Intercom - FireCom - Wireless - 2 Position	Chassis	1
C-5555	Camera System - OEM - Rear Camera	Rescue Chassis	1
C-3566	Tailboard Bumper, 8"	Rescue Chassis	1
C-5550	Trailer Plug - 12V - 7 Pin	Rescue Chassis	1
C-4238	R400 - Body, Rsq, Alum, 144" x 96", 84" CA, Ford	Rescue Body	1
C-5587	Roll Up Door, Upgrade, Paint	Rescue Body	1
C-5697	Black Out Option	Wildland Body	1
C-4410	Slide Out And Down Tray 12"-24"	Rescue Body	4
C-4537	Compartment Slide Out Tray, 250lbs	Rescue Body	2
C-4538	Slide Out Tray, 1000 lbs	Rescue Body	1
C-4145	Compartment Slide Out Tray, 200lbs	Wildland Body	1
C-4209	Adjustable Shelf	Wildland Body	6
C-4698	NFPA Compliance	Rescue Body	1
C-3764	Stop/Tail/Turn Lights, Whelen M6BTT/M6FC	Electrical	1
C-3765	Back up Lights, Whelen M6 Series, LED,	Electrical	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
C-4535	Siren, Electronic, Whelen, Core	Electrical	1
C-3747	Siren Speaker (1)	Electrical	1
C-4563	Lightbar Mount Cab Roof, No Guard	Electrical	1
C-3827	Scene Lights, Whelen Pioneer, PCPSM2C, Surface Mount	Electrical	3
C-4927	Headlight Flasher	Electrical	1
C-4528	Flashlight Installation, Supplied (2)	Rescue Equipment	1
C-4530	Streamlight Portable Flashlights	Rescue Equipment	1
C-3962	Traffic Advisor, Whelen, TAM85	Electrical	1
C-4186	Scene Light, Halo, Rigid 20"	Electrical	1
C-4177	Golight Spotlight	Electrical	1
C-4070	Ground Lights - Chassis - LED Strips - 4Door	Electrical	1
C-3616	Ground Lights, Under Body Front	Electrical	1
C-3617	Ground Lights, Under Rear Step	Electrical	1
C-3528	Kussmaul 1000 - With Auto-Eject	Electrical	1
C-5661	Power Inverter, Kussmaul	Electrical	1
C-3598	Door Ajar Light, LED	Electrical	1
C-5562	Stripe, Reflective, Scotchlite, Rear Chevron	Graphics	1
C-5633	Reflective Striping, Interior, Vertically Hinged Doors	Graphics	1
C-3769	Custom Door Graphics	Graphics	1
C-3766	Lettering, Cab, 3" Reflective	Graphics	1
C-3772	1 - 4 - 1 Reflective Stripe	Graphics	1
C-3525	Battery Switch, Master Disconnect, CH, R	Required Components	1
C-3759	Fuse Box	Required Components	1
C-3758	Back Up Alarm	Required Components	1
C-3763	License Plate, Mounting	Required Components	1
C-3762	Clearance Lights, LED, DOT	Required Components	1
C-4429	Mud Flaps, Rear Wheels, SEV Logo	Required Components	1
C-3570	Emblems, Skeeter	Required Components	1
C-4022	Drawings	Required Components	1
C-3760	Electrical Harness & Wiring	Required Components	1
C-3780	Capacities Placard, Reflective	Required Components	1
C-3474	Chassis Prep	Required Components	1
C-3630	Final Assembly	Required Components	1
C-3796	12V Electrical Load	Required Components	1
C-3799	Road Test, 10 miles	Required Components	1
C-3800	5-Year Parts & Labor/10-Year Body Integr	Required Components	1
C-4523	Basic Apparatus Labeling	Other	1
C-4338	NO -- NFPA Speed Restriction	Other	1
C-3785	Pre-Construction Conference, At Factory	Other	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
C-4269	Final Inspection at Skeeter	Other	1
C-3790	Training, Factory Supplied, Factory loca	Other	1
C-4340	Delivery, Dealer Provided	Other	1
C-4224	Payment Terms, 100% with Order	Other	1
SP-1832	The rear bumper to be painted black	Chassis	1
SP-1833	There shall be grab handles installed Beside rear door on both sides.	Rescue Body	1
SP-1834	There shall be (2) Two Rear body rope anchors located at the top rear corners Each anchor will have a capacity of 400lbs. 2 anchors combined will hold 600lbs	Rescue Body	1
SP-1851	LH and RH front compartments will have 2 doors on each side making them separate compartments with a wall between them so shelving could be added to either. The very front would house the bunker gear on each side.	Rescue Body	1
SP-1837	There shall be two (2) SCBA bottle storage tubes located in the wheel-well, one (1) each side of the body. There shall be an aluminum locking door securing the bottles. The doors shall be black. *This option will reduce the height of the L2/R2 Compartments	Rescue Body	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
SP-1839	A Whelen Freedom 5 red/blue lightbar shall be installed. The 54" lightbar shall be designed to meet the minimum clearing requirements for Zone A Upper. The internal components of the lightbar shall be housed within a two piece extruded aluminum base/top. The outer shell shall be clear optic polycarbonate lenses designed to maximize light output and shield against environmental elements. The lightbar shall utilize snap-in brackets to hold in the lightheads. The brackets shall give the end user the ability to make quick repairs. The lightbar shall have all solid state components. The lightbar shall have two wire harnesses exiting the unit: one (1) 17 conductor 22 gauge control cable which controls all internal light functions; and one (1) 2 conductor 10 gauge cable for main power and ground. Each cable shall be 15' long. The lightbar shall have two (2) Red/White corner super LED Modules one (1) located in the driver front one (1) located in the passenger rear, and two (2) Blue White corner Super LED modules one (1) located in the passenger front one (1) located in the driver rear to provide off angle protection for the front and rear of the vehicle. Each corner module shall consist of twelve (12) Super-LEDs mounted within a vacuum metalized parabolic reflector. The corner module shall also utilize an optic collimator for maximum light output. The twelve (12) LEDs shall be mounted in one straight line. The solid state I/O board shall be microprocessor controlled. The I/O board shall have built-in reverse-polarity protection and output-short protection. The board shall have the ability to flash sixteen (16) LED warning lights. There shall be a data bank of 13 Scan-Lock flash patterns including steady burn. The board shall also have outputs to add takedown and alley lights. Low power and cruise light function shall also be included. The cruise light function shall allow the user to employ the four (4) corner modules as marker courtesy lights. The lightbar shall include clear "Take Down" and "Alley Lights". The lightbar shall have an amber "Traffic Advisor" built into the rear portion of the lightbar. The lightbar shall be fully populated with Red/White and Blue/White LED modules starting with the driver side front corner being Red/White.	Electrical	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
SP-1840	ZONE A -- LOWER FRONT WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be in the front forward facing area of the front bumper. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. The lighthoods shall be surface mountable via two screws. The lighthoods shall utilize an optic collimator and a chrome vacuum metalized reflector for maximum illumination. ZONE B AND D -- INTERSECTION LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be installed on bumper extension, as far forward as possible. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE B AND D -- LOWER SIDE REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flange shall be installed in lower rearmost side body area as space permits. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE B AND D -- UPPER SIDE REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be installed in the upper rear body side panel. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE C -- UPPER REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be installed in the upper rear corner of the handrails. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE C -- LOWER REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be lower rear of body. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens.	Electrical	1

CONRAD FIRE EQUIPMENT, INC.

19922 W 162nd Street Olathe, KS 66062

www.CONRADFIRE.com

(913) 780-5521

(913) 780-5251 Fax

QUOTATION
152548

CUSTOMER NO.
6927

BILL TO:

**SHAWNEE FIRE DEPT
16 W 9TH ST
SHAWNEE, OK 74801**

SHIP TO:

**SHAWNEE FIRE DEPT
16 W 9TH ST
SHAWNEE, OK 74801**

PHONE: 405-878-1671

PAGE 1

FAX: 405-878-1748

DATE		SHIP VIA		F.O.B.		TERMS	
01/08/25		GROUND				NET 30 DAYS	
PURCHASE ORDER NUMBER		ORDER DATE		SALESPERSON		OUR QUOTE NUMBER	
STREAMLIGHT VULC 180		01/08/25		147 252		152548	
QUANTITY		ITEM NUMBER		DESCRIPTION		UNIT PRICE	AMOUNT
ORDERED	SHIPPED						
2		STR.44311		VULCAN 180 120V/12V DC ORANGE		221.44	442.88
2		STR.44315		"Vulcan 180 Vehicle Mount Syst		208.57	417.14
				CUSTOMER RESPONSIBLE FOR ANY SHIPPING COST.			
				This quote expires thirty (30) days after the date appearing on this quotation unless CFE receives and accepts Buyer's order within that period. Prior to the referenced expiration date, this quote may be changed by CFE at any time upon CFE providing such written notice to Buyer prior to CFE receiving and accepting Buyer's order within the aforementioned thirty (30) day period.			
				Please note: A 3% credit card service fee will be assessed on all credit card payments in excess of \$3,000. Orders may not be broken into smaller dollar amounts to avoid this service charge. Cash, check, ACH, and wire transfer payments will not be subject to a service charge.			
Product Total		Discount		Freight		Taxable Amount	Tax
860.02		0.00				860.02	0.00
						Misc. Amt.	QUOTATION TOTAL
							860.02
"WE APPRECIATE YOUR BUSINESS"							
RETURNED GOODS WILL NOT BE ACCEPTED WITHOUT PRIOR RETURN AUTHORIZATION NUMBER FROM CONRAD FIRE EQUIPMENT. ALL RETURNS ARE SUBJECT TO A RESTOCKING FEE.							



Fire Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: James Kriwanek, Fire Chief
Subject: Consideration of a resolution approving the purchase of Ford F550 Skeeter Rescue from Conrad Fire Equipment under the Cooperative Purchasing Agreement with Houston-Galveston Area Council (HGAC).

Background: Under the umbrella of the Cooperative Purchasing Agreement with the Houston-Galveston Area Council (HGAC), City staff proposes the purchase of Ford F550 Skeeter Rescue from Conrad Fire Equipment.

The purchase of this light duty rescue vehicle would replace the current older commercial rescue vehicle, thereby reducing out-of-service time for repairs and improving reliability of emergency response.

Financial Impact: \$323,867.99; from Capital Improvement Fund, Fire Suppression, Capital Outlay-Equipment - 301-5-0720-54500

Attachments: App Change Order - SHAWNEE OK BID#2352 (002), HGAC Agreement Skeeter Emergency Vehicles, Cooperative Purchasing Resolution Fire Purchase

Staff Recommendation: Approval of the item



Apparatus Change Order

Customer Name: **SHAWNEE, OK**

Sales Rep: **STEVE MARTIN**

Submitted Date: **1/8/25**

Expiration Date: **2/28/25**

Apparatus Change Order Detail

Qty.	Description	Price
1	FORD SKEETER RESCUE	\$ 325,859.98

Proposal Bid No.: **2352**

Proposal Doc Date: **11/20/24**

Performance Bond: **NO**

Warranty Period: **Standard**

Estimated Build Time: **22 MO**

Change Order Costs

Original Order (with Pre-Payment Discount)

Apparatus Purchase Price	\$ 439,484.35
Trade-in Value	\$ 0.00
Price After Trade-in	\$ 439,484.35
Pre-Payment Discount	-\$ 3,924.29
Extrication Rescue Tools	\$ 0.00
Loose Equipment	\$ 0.00
Options	\$ 0.00
Due Upon Order	\$ 435,560.06

Change Order (with Pre-Payment Discount)

Apparatus Purchase Price	\$ 325,859.98
Trade-in Value	\$ 0.00
Price After Trade-in	\$ 325,859.98
Pre-Payment Discount	-\$ 2,852.01
Extrication Rescue Tools	\$ 0.00
Loose Equipment	\$ 860.02
Options	\$ 0.00
Due Upon Delivery	\$ 323,867.99

Payment Terms

PRICING IS BASED ON FULL PAYMENT HAVING BEEN MADE AT TIME OF ORDER. A CREDIT/REFUND EQUAL TO THE DIFFERENCE OF THE PRE-PAYMENT OF \$435,560.06 FOR BID#811 AND THE FINAL PRICE OF BID#2352 AS DELIVERED WILL BE ISSUED TO THE CUSTOMER.

Notes

RELATED TO PO:25-0558, THE ATTACHED SKEETER BID#2352 SPECIFICATIONS CONSTITUTES A CHANGE ORDER TO THE ORIGINAL SKEETER BID#811 SPECIFICATIONS, THE CHANGES OF WHICH ARE BEING MADE UNDER HGAC CONTRACT NUMBER FS12-23. ABOVE REFERENCED LOOSE EQUIPMENT IS IN REFERENCE TO ATTACHED QUOTE 152548 TO BE INCLUDED WITH THIS SALE.

NOTE: Pre-payment discounts quoted may vary based on final purchase price, prevailing interest rates, and manufacturing build time and are subject to change up to the time an order is placed. If deferred payment arrangements are required, the Customer must make such financial arrangements through a financial institution acceptable to Company.] All taxes, excises and levies that Company may be required to pay or collect by reason of any present or future law or by any governmental authority based upon the sale, purchase, delivery, storage, processing, use, consumption, or transportation of the Product sold by Company to the Customer shall be for the account of the Customer and shall be added to the Purchase Price. All delivery prices or prices with freight allowance are based upon prevailing freight rates and, in the event of any increase or decrease in such rates, the prices on all unshipped Product will be increased or decreased accordingly. Delinquent payments shall be subject to a carrying charge of 1.5 percent per month or such lesser amount permitted by law. Company will not be required to accept payment other than as set forth in this Agreement. Company shall have and retain a purchase money security interest in all goods and products now or hereafter sold to the Customer by Company or any of its affiliated companies to secure payment of the Purchase Price for all such goods and products. In the event of nonpayment by the Customer of any debt, obligation or liability now or hereafter incurred or owing by the Customer to Company, Company shall have and may exercise all rights and remedies of a secured party under Article 9 of the Uniform Commercial Code (UCC) as adopted by the state of [KANSAS].



Spec # 2352 Print List

Spec #: 2352	Dealership: Conrad Fire Equipment	Chassis: C-4434 (Ford F550 - 4x4 - Diesel - EXT Cab 84" CA)
Job #:	Sales Rep: Steve Martin	Body:
Creation Date: 11/20/2024	Account: Shawnee Fire Department	Truck Desc.:
Notes:		NWCG Typing:

Components

#	Component Description	Category	Quantity
C-4434	Ford F550 - 4x4 - Diesel - EXT Cab 84" CA	Chassis	1
C-4137	84" Cab to Axle	Chassis	1
C-4418	Paint OEM Stock Color	Rescue Chassis	1
C-4786	Cab Steps - Ford Super Cab	Rescue Chassis	1
C-4508	Tires/Wheels - OEM Tires and Wheels	Rescue Chassis	1
C-3493	Front Bumper - Ranchhand Steel - Powdercoat Black	Chassis	1
C-4806	Winch Power Plugs, 12V, Quick Disconnect	Rescue Chassis	1
C-4511	Console, Alum/Poly, SM Truck	Rescue Chassis	1
C-4811	Power Outlet 12V, Cigarette Lighter Type, Cab	Rescue Chassis	1
C-4812	Console - Upgraded Fuse Block	Rescue Chassis	1
C-4814	Cab Poly - EMS Cabinet - Half 2nd Row	Rescue Chassis	2
C-3534	Radio Install - 2 Radios (Customer Provided)	Chassis	1
C-3536	Intercom - FireCom - Wireless - 2 Position	Chassis	1
C-5555	Camera System - OEM - Rear Camera	Rescue Chassis	1
C-3566	Tailboard Bumper, 8"	Rescue Chassis	1
C-5550	Trailer Plug - 12V - 7 Pin	Rescue Chassis	1
C-4238	R400 - Body, Rsq, Alum, 144" x 96", 84" CA, Ford	Rescue Body	1
C-5587	Roll Up Door, Upgrade, Paint	Rescue Body	1
C-5697	Black Out Option	Wildland Body	1
C-4410	Slide Out And Down Tray 12"-24"	Rescue Body	4
C-4537	Compartment Slide Out Tray, 250lbs	Rescue Body	2
C-4538	Slide Out Tray, 1000 lbs	Rescue Body	1
C-4145	Compartment Slide Out Tray, 200lbs	Wildland Body	1
C-4209	Adjustable Shelf	Wildland Body	6
C-4698	NFPA Compliance	Rescue Body	1
C-3764	Stop/Tail/Turn Lights, Whelen M6BTT/M6FC	Electrical	1
C-3765	Back up Lights, Whelen M6 Series, LED,	Electrical	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
C-4535	Siren, Electronic, Whelen, Core	Electrical	1
C-3747	Siren Speaker (1)	Electrical	1
C-4563	Lightbar Mount Cab Roof, No Guard	Electrical	1
C-3827	Scene Lights, Whelen Pioneer, PCPSM2C, Surface Mount	Electrical	3
C-4927	Headlight Flasher	Electrical	1
C-4528	Flashlight Installation, Supplied (2)	Rescue Equipment	1
C-4530	Streamlight Portable Flashlights	Rescue Equipment	1
C-3962	Traffic Advisor, Whelen, TAM85	Electrical	1
C-4186	Scene Light, Halo, Rigid 20"	Electrical	1
C-4177	Golight Spotlight	Electrical	1
C-4070	Ground Lights - Chassis - LED Strips - 4Door	Electrical	1
C-3616	Ground Lights, Under Body Front	Electrical	1
C-3617	Ground Lights, Under Rear Step	Electrical	1
C-3528	Kussmaul 1000 - With Auto-Eject	Electrical	1
C-5661	Power Inverter, Kussmaul	Electrical	1
C-3598	Door Ajar Light, LED	Electrical	1
C-5562	Stripe, Reflective, Scotchlite, Rear Chevron	Graphics	1
C-5633	Reflective Striping, Interior, Vertically Hinged Doors	Graphics	1
C-3769	Custom Door Graphics	Graphics	1
C-3766	Lettering, Cab, 3" Reflective	Graphics	1
C-3772	1 - 4 - 1 Reflective Stripe	Graphics	1
C-3525	Battery Switch, Master Disconnect, CH, R	Required Components	1
C-3759	Fuse Box	Required Components	1
C-3758	Back Up Alarm	Required Components	1
C-3763	License Plate, Mounting	Required Components	1
C-3762	Clearance Lights, LED, DOT	Required Components	1
C-4429	Mud Flaps, Rear Wheels, SEV Logo	Required Components	1
C-3570	Emblems, Skeeter	Required Components	1
C-4022	Drawings	Required Components	1
C-3760	Electrical Harness & Wiring	Required Components	1
C-3780	Capacities Placard, Reflective	Required Components	1
C-3474	Chassis Prep	Required Components	1
C-3630	Final Assembly	Required Components	1
C-3796	12V Electrical Load	Required Components	1
C-3799	Road Test, 10 miles	Required Components	1
C-3800	5-Year Parts & Labor/10-Year Body Integr	Required Components	1
C-4523	Basic Apparatus Labeling	Other	1
C-4338	NO -- NFPA Speed Restriction	Other	1
C-3785	Pre-Construction Conference, At Factory	Other	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
C-4269	Final Inspection at Skeeter	Other	1
C-3790	Training, Factory Supplied, Factory loca	Other	1
C-4340	Delivery, Dealer Provided	Other	1
C-4224	Payment Terms, 100% with Order	Other	1
SP-1832	The rear bumper to be painted black	Chassis	1
SP-1833	There shall be grab handles installed Beside rear door on both sides.	Rescue Body	1
SP-1834	There shall be (2) Two Rear body rope anchors located at the top rear corners Each anchor will have a capacity of 400lbs. 2 anchors combined will hold 600lbs	Rescue Body	1
SP-1851	LH and RH front compartments will have 2 doors on each side making them separate compartments with a wall between them so shelving could be added to either. The very front would house the bunker gear on each side.	Rescue Body	1
SP-1837	There shall be two (2) SCBA bottle storage tubes located in the wheel-well, one (1) each side of the body. There shall be an aluminum locking door securing the bottles. The doors shall be black. *This option will reduce the height of the L2/R2 Compartments	Rescue Body	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
SP-1839	A Whelen Freedom 5 red/blue lightbar shall be installed. The 54" lightbar shall be designed to meet the minimum clearing requirements for Zone A Upper. The internal components of the lightbar shall be housed within a two piece extruded aluminum base/top. The outer shell shall be clear optic polycarbonate lenses designed to maximize light output and shield against environmental elements. The lightbar shall utilize snap-in brackets to hold in the lightheads. The brackets shall give the end user the ability to make quick repairs. The lightbar shall have all solid state components. The lightbar shall have two wire harnesses exiting the unit: one (1) 17 conductor 22 gauge control cable which controls all internal light functions; and one (1) 2 conductor 10 gauge cable for main power and ground. Each cable shall be 15' long. The lightbar shall have two (2) Red/White corner super LED Modules one (1) located in the driver front one (1) located in the passenger rear, and two (2) Blue White corner Super LED modules one (1) located in the passenger front one (1) located in the driver rear to provide off angle protection for the front and rear of the vehicle. Each corner module shall consist of twelve (12) Super-LEDs mounted within a vacuum metalized parabolic reflector. The corner module shall also utilize an optic collimator for maximum light output. The twelve (12) LEDs shall be mounted in one straight line. The solid state I/O board shall be microprocessor controlled. The I/O board shall have built-in reverse-polarity protection and output-short protection. The board shall have the ability to flash sixteen (16) LED warning lights. There shall be a data bank of 13 Scan-Lock flash patterns including steady burn. The board shall also have outputs to add takedown and alley lights. Low power and cruise light function shall also be included. The cruise light function shall allow the user to employ the four (4) corner modules as marker courtesy lights. The lightbar shall include clear "Take Down" and "Alley Lights". The lightbar shall have an amber "Traffic Advisor" built into the rear portion of the lightbar. The lightbar shall be fully populated with Red/White and Blue/White LED modules starting with the driver side front corner being Red/White.	Electrical	1



Spec # 2352 Print List

#	Component Description	Category	Quantity
SP-1840	ZONE A -- LOWER FRONT WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be in the front forward facing area of the front bumper. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. The lighthoods shall be surface mountable via two screws. The lighthoods shall utilize an optic collimator and a chrome vacuum metalized reflector for maximum illumination. ZONE B AND D -- INTERSECTION LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be installed on bumper extension, as far forward as possible. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE B AND D -- LOWER SIDE REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flange shall be installed in lower rearmost side body area as space permits. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE B AND D -- UPPER SIDE REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be installed in the upper rear body side panel. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE C -- UPPER REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be installed in the upper rear corner of the handrails. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens. ZONE C -- LOWER REAR WARNING LIGHTS Two (2) Whelen M-7 Series Model #M7J 3" x 7" warning lights with chrome flanges shall be lower rear of body. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The lighthouse configuration shall consist of RED 18 Super-LEDs and a clear optic polycarbonate lens.	Electrical	1

CONRAD FIRE EQUIPMENT, INC.

19922 W 162nd Street Olathe, KS 66062

www.CONRADFIRE.com

(913) 780-5521

(913) 780-5251 Fax

QUOTATION
152548

CUSTOMER NO.
6927

BILL TO:

**SHAWNEE FIRE DEPT
16 W 9TH ST
SHAWNEE, OK 74801**

SHIP TO:

**SHAWNEE FIRE DEPT
16 W 9TH ST
SHAWNEE, OK 74801**

PHONE: 405-878-1671

FAX: 405-878-1748

PAGE 1

DATE		SHIP VIA		F.O.B.		TERMS	
01/08/25		GROUND				NET 30 DAYS	
PURCHASE ORDER NUMBER		ORDER DATE		SALESPERSON		OUR QUOTE NUMBER	
STREAMLIGHT VULC 180		01/08/25		147 252		152548	
QUANTITY		ITEM NUMBER		DESCRIPTION		UNIT PRICE	AMOUNT
ORDERED	SHIPPED						
2		STR.44311		VULCAN 180 120V/12V DC ORANGE		221.44	442.88
2		STR.44315		"Vulcan 180 Vehicle Mount Syst		208.57	417.14
CUSTOMER RESPONSIBLE FOR ANY SHIPPING COST.							
This quote expires thirty (30) days after the date appearing on this quotation unless CFE receives and accepts Buyer's order within that period. Prior to the referenced expiration date, this quote may be changed by CFE at any time upon CFE providing such written notice to Buyer prior to CFE receiving and accepting Buyer's order within the aforementioned thirty (30) day period.							
Please note: A 3% credit card service fee will be assessed on all credit card payments in excess of \$3,000. Orders may not be broken into smaller dollar amounts to avoid this service charge. Cash, check, ACH, and wire transfer payments will not be subject to a service charge.							
Product Total		Discount		Freight		Taxable Amount	Tax
860.02		0.00				860.02	0.00
						Misc. Amt.	QUOTATION TOTAL
							860.02
"WE APPRECIATE YOUR BUSINESS"							
RETURNED GOODS WILL NOT BE ACCEPTED WITHOUT PRIOR RETURN AUTHORIZATION NUMBER FROM CONRAD FIRE EQUIPMENT. ALL RETURNS ARE SUBJECT TO A RESTOCKING FEE.							

H-GAC

Houston-Galveston Area Council

P.O. Box 22777 · 3555 Timmons · Houston, Texas 77227-2777

Cooperative Agreement - Contract - Skeeter Emergency Vehicles, LLC - Public Services - ID: 11629 - - FS12-23

MASTER GENERAL PROVISIONS

This Master Agreement is made and entered into, by and between the Houston-Galveston Area Council hereinafter referred to as H-GAC having its principal place of business at 3555 Timmons Lane, Suite 120, Houston, Texas 77027 and Skeeter Emergency Vehicles, LLC, hereinafter referred to as the Contractor, having its principal place of business at 850 Skeeter Way, Hillsboro, TX 76645.

WITNESSETH:

WHEREAS, H-GAC hereby engages the Contractor to perform certain services in accordance with the specifications of the Master Agreement; and

WHEREAS, the Contractor has agreed to perform such services in accordance with the specifications of the Master Agreement;

NOW, THEREFORE, H-GAC and the Contractor do hereby agree as follows:

ARTICLE 1: LEGAL AUTHORITY

The Contractor warrants and assures H-GAC that it possesses adequate legal authority to enter into this Master Agreement. The Contractor's governing body, where applicable, has authorized the signatory official(s) to enter into this Master Agreement and bind the Contractor to the terms of this Master Agreement and any subsequent amendments hereto.

ARTICLE 2: APPLICABLE LAWS

The Contractor agrees to conduct all activities under this Master Agreement in accordance with all federal laws, executive orders, policies, procedures, applicable rules, regulations, directives, standards, ordinances, and laws, in effect or promulgated during the term of this Master Agreement, including without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Contractor shall furnish H-GAC with satisfactory proof of its compliance therewith.

ARTICLE 3: PUBLIC INFORMATION

Except as stated below, all materials submitted to H-GAC, including any attachments, appendices, or other information submitted as a part of a submission or Master Agreement, are considered public information, and become the property of H-GAC upon submission and may be reprinted, published, or distributed in any manner by H-GAC according to open records laws, requirements of the US Department of Labor and the State of Texas, and H-GAC policies and procedures. In the event the Contractor wishes to claim portions of the response are not subject to the Texas Public Information Act, it shall so; however, the determination of the Texas Attorney General as to whether such information must be disclosed upon a public request shall be binding on the Contractor. H-GAC will request such a determination only if Contractor bears all costs for preparation of the submission. H-GAC is not responsible for the return of creative examples of work submitted. H-GAC will not be held accountable if material from submissions is obtained without the written consent of the contractor by parties other than H-GAC, at any time during the evaluation process.

ARTICLE 4: INDEPENDENT CONTRACTOR

The execution of this Master Agreement and the rendering of services prescribed by this Master Agreement do not change the independent status of H-GAC or the Contractor. No provision of this Master Agreement or act of H-GAC in performance of the Master Agreement shall be construed as making the Contractor the agent, servant, or

employee of H-GAC, the State of Texas, or the United States Government. Employees of the Contractor are subject to the exclusive control and supervision of the Contractor. The Contractor is solely responsible for employee related disputes and discrepancies, including employee payrolls and any claims arising therefrom.

ARTICLE 5: ANTI-COMPETITIVE BEHAVIOR

Contractor will not collude, in any manner, or engage in any practice which may restrict or eliminate competition or otherwise restrain trade.

ARTICLE 6: SUSPENSION AND DEBARMENT

Debarment and Suspension (Executive Orders 12549 and 12689) – A contract award (2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Pursuant to the Federal Rule above, Respondent certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency or by the State of Texas and at all times during the term of the Contract neither it nor its principals will be debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency or by the State of Texas Respondent shall immediately provide the written notice to H-GAC if at any time the Respondent learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances. H-GAC may rely upon a certification of the Respondent that the Respondent is not debarred, suspended, ineligible, or voluntarily excluded from the covered contract, unless the H-GAC knows the certification is erroneous.

ARTICLE 7: GOAL FOR CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN’S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS (if subcontracts are to be let)

H-GAC’s goal is to assure that small and minority businesses, women’s business enterprises, and labor surplus area firms are used when possible in providing services under a contract. In accordance with federal procurements requirements of 2 CFR §200.321, if subcontracts are to be let, the prime contractor must take the affirmative steps listed below:

1. Placing qualified small and minority businesses and women’s business enterprises on solicitation lists;
2. Assuring that small and minority businesses and women’s business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller task or quantities to permit maximum participation by small and minority businesses, and women’s business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women’s business enterprises;
5. Using the services and assistance as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
- 6.

Nothing in this provision will be construed to require the utilization of any firm that is either unqualified or unavailable. The Small Business Administration (SBA) is the primary reference and database for information on requirements related to Federal Subcontracting <https://www.sba.gov/federal-contracting/contracting-guide/prime-subcontracting>

NOTE: The term DBE as used in this solicitation is understood to encompass all programs/business enterprises such as: Small Disadvantaged Business (SDB), Historically Underutilized Business (HUB), Minority Owned Business Enterprise (MBE), Women Owned Business Enterprise (WBE) and Disabled Veteran Business Enterprise (DVBE) or other designation as issued by a certifying agency.

Contractor agrees to work with and assist HGACBuy customer in meeting any DBE targets and goals, as may be required by any rules, processes, or programs they might have in place. Assistance may include compliance with reporting requirements, provision of documentation, consideration of Certified/Listed

subcontractors, provision of documented evidence that an active participatory role for a DBE entity was considered in a procurement transaction, etc.

ARTICLE 8: SCOPE OF SERVICES

The services to be performed by the Contractor are outlined in an Attachment to this Master Agreement.

ARTICLE 9: PERFORMANCE PERIOD

This Master Agreement shall be performed during the period which begins Dec 01 2023 and ends Nov 30 2027. All services under this Master Agreement must be rendered within this performance period, unless directly specified under a written change or extension provisioned under Article 21, which shall be fully executed by both parties to this Master Agreement.

ARTICLE 10: PAYMENT OR FUNDING

Payment provisions under this Master Agreement are outlined in the Special Provisions. H-GAC will not pay for any expenses incurred prior to the execution date of a contract, or any expenses incurred after the termination date of the contract.

ARTICLE 11: PAYMENT FOR WORK

The H-GAC Customer is responsible for making payment to the Contractor upon delivery and acceptance of the goods or completion of the services and submission of the subsequent invoice.

ARTICLE 12: PAYMENT TERMS/PRE-PAYMENT/QUANTITY DISCOUNTS

If discounts for accelerated payment, pre-payment, progress payment, or quantity discounts are offered, they must be clearly indicated in the Contractor's submission prior to contract award. The applicability or acceptance of these terms is at the discretion of the Customer.

ARTICLE 13: REPORTING REQUIREMENTS

If the Contractor fails to submit to H-GAC in a timely and satisfactory manner any report required by this Master Agreement, or otherwise fails to satisfactorily render performances hereunder, H-GAC may terminate this Master Agreement with notice as identified in Article 29 of these General Provisions. H-GAC has final determination of the adequacy of performance and reporting by Contractor. Termination of this Master Agreement for failure to perform may affect Contractor's ability to participate in future opportunities with H-GAC. The Contractor's failure to timely submit any report may also be considered cause for termination of this Master Agreement. Any additional reporting requirements shall be set forth in the Special Provisions of this Master Agreement.

ARTICLE 14: INSURANCE

Contractor shall maintain insurance coverage for work performed or services rendered under this Master Agreement as outlined and defined in the attached Special Provisions.

ARTICLE 15: SUBCONTRACTS AND ASSIGNMENTS

Except as may be set forth in the Special Provisions, the Contractor agrees not to assign, transfer, convey, sublet, or otherwise dispose of this Master Agreement or any right, title, obligation, or interest it may have therein to any third party without prior written approval of H-GAC. The Contractor acknowledges that H-GAC is not liable to any subcontractor or assignee of the Contractor. The Contractor shall ensure that the performance rendered under all subcontracts shall result in compliance with all the terms and provisions of this Master Agreement as if the performance rendered was rendered by the Contractor. Contractor shall give all required notices, and comply with all laws and regulations applicable to furnishing and performance of the work. Except where otherwise expressly required by applicable law or regulation, H-GAC shall not be responsible for monitoring Contractor's compliance, or that of Contractor's subcontractors, with any laws or regulations.

ARTICLE 16: AUDIT

Notwithstanding any other audit requirement, H-GAC reserves the right to conduct or cause to be conducted an independent audit of any transaction under this Master Agreement, such audit may be performed by the H-GAC

local government audit staff, a certified public accountant firm, or other auditors designated by H-GAC and will be conducted in accordance with applicable professional standards and practices. The Contractor understands and agrees that the Contractor shall be liable to the H-GAC for any findings that result in monetary obligations to H-GAC.

ARTICLE 17: TAX EXEMPT STATUS

H-GAC and Customer members are either units of government or qualified non-profit agencies, and are generally exempt from Federal and State sales, excise or use taxes. Respondent must not include taxes in its Response. It is the responsibility of Contractor to determine the applicability of any taxes to an order and act accordingly. Exemption certificates will be provided upon request.

ARTICLE 18: EXAMINATION OF RECORDS

The Contractor shall maintain during the course of the work complete and accurate records of all of the Contractor's costs and documentation of items which are chargeable to H-GAC under this Master Agreement. H-GAC, through its staff or designated public accounting firm, the State of Texas, and United States Government, shall have the right at any reasonable time to inspect, copy and audit those records on or off the premises by authorized representatives of its own or any public accounting firm selected by H-GAC. The right of access to records is not limited to the required retention period, but shall last as long as the records are retained. Failure to provide access to records may be cause for termination of the Master Agreement. The records to be thus maintained and retained by the Contractor shall include (without limitation): (1) personnel and payroll records, including social security numbers and labor classifications, accounting for total time distribution of the Contractor's employees working full or part time on the work, as well as cancelled payroll checks, signed receipts for payroll payments in cash, or other evidence of disbursement of payroll payments; (2) invoices for purchases, receiving and issuing documents, and all other unit inventory records for the Contractor's stocks or capital items; and (3) paid invoices and cancelled checks for materials purchased and for subcontractors' and any other third parties' charges.

Contractor agrees that H-GAC will have the right, with reasonable notice, to inspect its records pertaining to purchase orders processed and the accuracy of the fees payable to H-GAC. The Contractor further agrees that the examination of records outlined in this article shall be included in all subcontractor or third-party Master Agreements.

ARTICLE 19: RETENTION OF RECORDS

The Contractor and its subcontractors shall maintain all records pertinent to this Master Agreement, and all other financial, statistical, property, participant records, and supporting documentation for a period of no less than seven (7) years from the later of the date of acceptance of the final payment or until all audit findings have been resolved. If any litigation, claim, negotiation, audit or other action involving the records has been started before the expiration of the retention period, the records shall be retained until completion of the action and resolution of all issues which arise from it, or until the end of the seven (7) years, whichever is later, and until any outstanding litigation, audit, or claim has been fully resolved.

ARTICLE 20: DISTRIBUTORS, VENDORS, RESELLERS

Contractor agrees and acknowledges that any such designations of distributors, vendors, resellers or the like are for the convenience of the Contractor only and the awarded Contractor will remain responsible and liable for all obligations under the Contract and the performance of any designated distributor, vendor, reseller, etc. Contractor is also responsible for receiving and processing any Customer purchase order in accordance with the Contract and forwarding of the Purchase Order to the designated distributor, vendor, reseller, etc. to complete the sale or service. H-GAC reserves the right to reject any entity acting on the Contractor's behalf or refuse to add entities after a contract is awarded.

ARTICLE 21: CHANGE ORDERS AND AMENDMENTS

- A. Any alterations, additions, or deletions to the terms of this Master Agreement, which are required by changes in federal or state law or by regulations, are automatically incorporated without written amendment hereto, and shall become effective on the date designated by such law or by regulation.
- B. To ensure the legal and effective performance of this Master Agreement, both parties agree that any amendment that affects the performance under this Master Agreement must be mutually agreed upon and that all such amendments must be in writing. After a period of no less than 30 days subsequent to written notice, unless sooner implementation is required by law, such amendments shall have the effect of qualifying the terms of this Master Agreement and shall be binding upon the parties as if written herein.
- C. Customers have the right to issue a change order to any purchase orders issued to the Contractor for the purposes of clarification or inclusion of additional specifications, qualifications, conditions, etc. The change order must be in writing and agreed upon by Contractor and the Customer agency prior to issuance of any Change Order. A copy of the Change Order must be provided by the Contractor to, and acknowledged by, H-GAC.

ARTICLE 22: CONTRACT ITEM CHANGES

- A. If a manufacturer discontinues a contracted item, that item will automatically be considered deleted from the contract with no penalty to Contractor. However, H-GAC may at its sole discretion elect to make a contract award to the next lowest Respondent for the item, or take any other action deemed by H-GAC, at its sole discretion, to be in the best interests of its Customers.
- B. If a manufacturer makes any kind of change in a contracted item which affects the contract price, Contractor must advise H-GAC of the details. H-GAC may allow or reject the change at its sole discretion. If the change is rejected, H-GAC will remove the item from its program and there will be no penalty to Contractor. However, H-GAC may at its sole discretion elect to make a contract award to the next lowest Respondent for the item, or take any other action deemed by H-GAC, at its sole discretion, to be in the best interests of its Customers.
- C. If a manufacturer makes any change in a contracted item which does not affect the contract price, Contractor shall advise H-GAC of the details. If the 'new' item is equal to or better than the originally contracted item, the 'new' item shall be approved as a replacement. If the change is rejected H-GAC will remove the item from its program and there will be no penalty to Contractor. However, H-GAC may at its sole discretion elect to make a contract award to the next lowest Respondent for the item or may take any other action deemed by H-GAC at its sole discretion, to be in the best interests of its Customers.
- D. In the case of specifically identified catalogs or price sheets which have been contracted as base bid items or as published options, routine published changes to products and pricing will be automatically incorporated into the contract. However, Contractor must still provide written notice and an explanation of the changes to products and pricing. H-GAC will respond with written approval.

ARTICLE 23: CONTRACT PRICE ADJUSTMENTS

Price Decreases

If Contractor's Direct Cost decreases at any time during the full term of this award, Contractor must immediately pass the decrease on to H-GAC and lower its prices by the amount of the decrease in Direct Cost. (Direct Cost means Contractor's cost from the manufacturer of any item or if Contractor is the manufacturer, the cost of raw materials required to manufacture the item, plus costs of transportation from manufacturer to Contractor and Contractor to H-GAC. Contractor must notify H-GAC of price decreases in the same way as for price increases set out below. The price decrease shall become effective upon H-GAC's receipt of Contractor's notice. If Contractor routinely offers discounted contract pricing, H-GAC may request Contractor accept amended contract pricing equivalent to the routinely discounted pricing.

Price Increase

Contractors may request a price increase for items priced as Base Bid items and Published Options. The amount of any increase will not exceed actual documented increase in Contractor's Direct Cost and will not exceed 10% of the previous bid price. Considerations on the percentage limit will be given if the price increase is the result of increased tariff charges or other governmental actions, or other economic factors. Manufacturer price/contract changes involving the sale of motor vehicles will be considered and may be allowed during the entire contract period subject to submission and verification of the proper documentation required for a contract change as referenced in this section.

Price Changes

Any permanent increase or decrease in offered pricing for a base contract item or published option is considered a price change. Temporary increases in pricing by whatever name (e.g., 'surcharge', 'adjustment', 'equalization charge', 'compliance charge', 'recovery charge', etc.), are also considered to be price changes.

For published catalogs and price sheets as part of an H-GAC contract, requests to amend the contract to reflect any new published catalog or price sheet must be submitted whenever the manufacturer publishes a new document. The request must include the new catalog or price sheet. All Products shall, at time of sale, be equipped as required under any then current applicable local, state, and federal government requirements. If, during any contract, changes are made to any government requirements which cause a manufacturer's costs of production to increase, Contractor may increase pricing to the extent of Contractor's actual cost increase. The increase must be substantiated with support documentation acceptable to H-GAC prior to taking effect. Modifications to a Product required to comply with such requirements which become effective after the date of any sale are the responsibility of the Customer.

Requesting Price Increase/Required Documentation

Contractor must submit a written overview of changes requested and reasons for the request, stating the amount of the increase, along with an itemized list of any increased prices, showing the Contractor's current price, revised price, the actual dollar difference and the percentage of the price increase by line item. Price change requests must be supported with substantive documentation (e.g., notices from suppliers and manufacturers of pricing changes in products, components, transportation, raw materials or commodities, and/or product availability, copies of invoices from suppliers, etc.) clearly showing that Contractor's actual costs have increased per the applicable line-item bid. The Producer Price Index (PPI) may be used as partial justification, subject to approval by H-GAC, but no price increase based solely on an increase in the PPI will be allowed. This documentation should be submitted in Excel format to facilitate analysis and updating of the website. The letter and documentation must be sent to Lead Program Coordinator, james.glover@h-gac.com.

Review/Approval of Requests

If H-GAC approves the price increase, Contractor will be notified in writing; no price increase will be effective until Contractor receives this notice. If H-GAC does not approve Contractor's price increase, Contractor may terminate its performance upon sixty (60) days advance written notice to H-GAC, however Contractor must fulfill any outstanding Purchase Orders. Termination of performance is Contractor's only remedy if H-GAC does not approve the price increase. H-GAC reserves the right to accept or reject any price change request.

ARTICLE 24: DELIVERIES AND SHIPPING TERMS

The Contractor agrees to make deliveries only upon receipt of authorized Customer Purchase Order acknowledged by H-GAC. Delivery made without such Purchase Order will be at Contractor's risk and will leave H-GAC the option of canceling any contract awarded to the Contractor. The Contractor must secure and deliver any item within five (5) working days, or as agreed to on any corresponding customer Purchase Order.

Shipping must be Freight On Board Destination to the delivery location designated on the Customer purchase order. The Contractor will retain title and control of all goods until delivery is completed and the Customer has accepted the delivery. All risk of transportation and all related charges are the responsibility of the Contractor. The Customer will notify the Contractor and H-GAC promptly of any damaged goods and will assist the Contractor in arranging for inspection. The Contractor must file all claims for visible or concealed damage. Unless otherwise stated in the Master Agreement, deliveries must consist only of new and unused merchandise.

ARTICLE 25: RESTOCKING (EXCHANGES AND RETURNS)

There will be no restocking charge to the Customer for return or exchange of any item purchased under the terms of any award. If the Customer wishes to return items purchased under an awarded contract, the Contractor agrees to exchange, these items for other items, with no additional charge incurred. Items must be returned to Contractor within thirty (30) days from date of delivery. If there is a difference in price in the items exchanged, the Contractor must notify H-GAC and invoice Customer for increase price or provide the Customer with a credit or refund for any decrease in price per Customer's preference. On items returned, a credit or cash refund will be issued by the Contractor to Customer. This return and exchange option will extend for thirty (30) days following the expiration of the term of the Contract. All items returned by the Customer must be unused and in the same merchantable condition as when received. Items that are special ordered may be returned only upon approval of the Contractor.

ARTICLE 26: MANUALS

Each product delivered under contract to any Customer must be delivered with at least one (1) copy of a safety and operating manual and any other technical or maintenance manual. The cost of the manual(s) must be included in the price for the Product offered.

ARTICLE 27: OUT OF STOCK, PRODUCT RECALLS, AND DISCONTINUED PRODUCTS

H-GAC does NOT purchase the products sold pursuant to a Solicitation or Master Agreement. Contractor is responsible for ensuring that notices and mailings, such as Out of Stock or Discontinued Notices, Safety Alerts, Safety Recall Notices, and customer surveys, are sent directly to the Customer with a copy sent to H-GAC. Customer will have the option of accepting any equivalent product or canceling the item from Customer's Purchase Order. Contractor is not authorized to make substitutions without prior approval.

ARTICLE 28: WARRANTIES, SALES, AND SERVICE

Warranties must be the manufacturer's standard and inclusive of any other warranty requirements stated in the Master Agreement; any warranties offered by a dealer will be in addition to the manufacturer's standard warranty and will not be a substitute for such. Pricing for any product must be inclusive of the standard warranty.

Contractor is responsible for the execution and effectiveness of all product warranty requests and any claims, Contractor agrees to respond directly to correct warranty claims and to ensure reconciliation of warranty claims that have been assigned to a third party.

ARTICLE 29: TERMINATION PROCEDURES

The Contractor acknowledges that this Master Agreement may be terminated for Convenience or Default. H-GAC will not pay for any expenses incurred after the termination date of the contract.

A. Convenience

H-GAC may terminate this Master Agreement at any time, in whole or in part, with or without cause, whenever H-GAC determines that for any reason such termination is in the best interest of H-GAC, by providing written notice by certified mail to the Contractor. Upon receipt of notice of termination, all services hereunder of the Contractor and its employees and subcontractors shall cease to the extent specified in the notice of termination.

The Contractor may cancel or terminate this Master Agreement upon submission of thirty (30) days written notice, presented to H-GAC via certified mail. The Contractor may not give notice of cancellation after it has received notice of default from H-GAC.

B. Default

H-GAC may, by written notice of default to the Contractor, terminate the whole or any part of the Master Agreement, in any one of the following circumstances:

- (1) If the Contractor fails to perform the services herein specified within the time specified herein or any extension thereof; or
- (2) If the Contractor fails to perform any of the other provisions of this Master Agreement for any reason whatsoever, or so fails to make progress or otherwise violates the Master Agreements that completion of services herein specified within the Master Agreement term is significantly endangered, and in

either of these two instances does not cure such failure within a period of ten (10) days (or such longer period of time as may be authorized by H-GAC in writing) after receiving written notice by certified mail of default from H-GAC.

- (3) In the event of such termination, Contractor will notify H-GAC of any outstanding Purchase Orders and H-GAC will consult with the End User and notify the Contractor to what extent the End User wishes the Contractor to complete the Purchase Order. If Contractor is unable to do so, Contractor may be subject to a claim for damages from H-GAC and/or the End User.

ARTICLE 30: SEVERABILITY

H-GAC and Contractor agree that should any provision of this Master Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Master Agreement, which shall continue in full force and effect.

ARTICLE 31: FORCE MAJEURE

To the extent that either party to this Master Agreement shall be wholly or partially prevented from the performance of any obligation or duty placed on such party by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident, order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of force majeure shall rest solely with H-GAC.

ARTICLE 32: CONFLICT OF INTEREST

No officer, member or employee of the Contractor or Contractors subcontractor, no member of the governing body of the Contractor, and no other public officials of the Contractor who exercise any functions or responsibilities in the review or Contractor approval of this Master Agreement, shall participate in any decision relating to this Master Agreement which affects his or her personal interest, or shall have any personal or pecuniary interest, direct or indirect, in this Master Agreement.

- A. **Conflict of Interest Questionnaire:** Chapter 176 of the Texas Local Government Code requires contractors contracting or seeking to contract with H-GAC to file a conflict-of-interest questionnaire (CIQ) if they have an employment or other business relationship with an H-GAC officer or an officer's close family member. The required questionnaire and instructions are located on the H-GAC website or at the Texas Ethics Commission website <https://www.ethics.state.tx.us/forms/CIQ.pdf>. H-GAC officers include its Board of Directors and Executive Director, who are listed on this website. Respondent must complete and file a CIQ with the Texas Ethics Commission if an employment or business relationship with H-GAC office or an officer's close family member as defined in the law exists.
- B. **Certificate of Interested Parties Form – Form 1295:** As required by Section 2252.908 of the Texas Government Code. H-GAC will not enter a Contract with Contractor unless (i) the Contractor submits a disclosure of interested parties form to H-GAC at the time the Contractor submits the contract H-GAC, or (ii) the Contractor is exempt from such requirement. The required form and instructions are located at the Texas Ethics Commission website https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. Respondents who are awarded a Contract must submit their Form 1295 with the signed Contract to H-GAC.

ARTICLE 33: FEDERAL COMPLIANCE

Contractor agrees to comply with all federal statutes relating to nondiscrimination, labor standards, and environmental compliance. With regards to "Rights to Inventions Made Under a Contract or Master Agreement," If the Federal award meets the definition of "funding Master Agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding Master Agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Master Agreements," and any implementing regulations issued by the awarding agency. Contractor agrees to be wholly compliant with the provisions of 2 CFR 200, Appendix II. Additionally, for work to be performed under the Master Agreement or subcontract thereof, including procurement

of materials or leases of equipment, Contractor shall notify each potential subcontractor or supplier of the Contractor's federal compliance obligations. These may include, but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) the Fair Labor Standards Act of 1938 (29 USC 676 et. seq.), (d) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of handicaps and the Americans with Disabilities Act of 1990; (e) the Age Discrimination in Employment Act of 1967 (29 USC 621 et. seq.) and the Age Discrimination Act of 1974, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (f) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (g) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to the nondiscrimination on the basis of alcohol abuse or alcoholism; (h) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (i) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (j) any other nondiscrimination provisions in any specific statute(s) applicable to any Federal funding for this Master Agreement; (k) the requirements of any other nondiscrimination statute(s) which may apply to this Master Agreement; (l) applicable provisions of the Clean Air Act (42 U.S.C. §7401 et seq.), the Federal Water Pollution Control Act, as amended (33 U.S.C. §1251 et seq.), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and the Environmental Protection Agency regulations at 40 CFR Part 15; (m) applicable provisions of the Davis- Bacon Act (40 U.S.C. 276a - 276a-7), the Copeland Act (40 U.S.C. 276c), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-332), as set forth in Department of Labor Regulations at 20 CFR 5.5a; (n) the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

ARTICLE 34: PROHIBITION ON CONTRACTING WITH ENTITIES USING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE EQUIPMENT (EFFECTIVE AUG. 13, 2020 AND AS AMENDED OCTOBER 26, 2020)

Pursuant to 2 CFR 200.216, Contractor shall not offer equipment, services, or system that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Covered telecommunications equipment or services means 1) telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities); 2) for the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities); 3) telecommunications or video surveillance services provided by such entities or using such equipment; or 4) telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country. Respondent must comply with requirements for certifications. The provision at 48 C.F.R Section 52.204-26 requires that offerors review SAM prior to completing their required representations. This rule applies to all acquisitions, including acquisitions at or below the simplified acquisition threshold and to acquisitions of commercial items, including commercially available off the-shelf items.

ARTICLE 35: DOMESTIC PREFERENCE

In accordance with 2 CFR 200.322, as appropriate and to the extent consistent with law, when using federal grant award funds H-GAC should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). H-GAC must include this requirement in all subawards including all contracts and purchase orders for work or products under the federal grant award. If Contractor intends to qualify for Purchase Orders using federal grant money, then it shall work with H-GAC to provide all required certifications and other documentation needed to show compliance.

ARTICLE 36: CRIMINAL PROVISIONS AND SANCTIONS

The Contractor agrees to perform the Master Agreement in conformance with safeguards against fraud and abuse as set forth by the H-GAC, the State of Texas, and the acts and regulations of any related state or federal agency. The Contractor agrees to promptly notify H-GAC of any actual or suspected fraud, abuse, or other criminal activity through the filing of a written report within twenty-four (24) hours of knowledge thereof. Contractor shall notify H-GAC of any accident or incident requiring medical attention arising from its activities under this Master Agreement within twenty-four (24) hours of such occurrence. Theft or willful damage to property on loan to the Contractor from H-GAC, if any, shall be reported to local law enforcement agencies and H-GAC within two (2) hours of discovery of any such act.

The Contractor further agrees to cooperate fully with H-GAC, local law enforcement agencies, the State of Texas, the Federal Bureau of Investigation, and any other duly authorized investigative unit, in carrying out a full investigation of all such incidents.

The Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against the Contractor pertaining to this Master Agreement or which would adversely affect the Contractor's ability to perform services under this Master Agreement.

ARTICLE 37: INDEMNIFICATION AND RECOVERY

H-GAC's liability under this Master Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to its order processing charge. In no event will H-GAC be liable for any loss of use, loss of time, inconvenience, commercial loss, lost profits, or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor agrees, to the extent permitted by law, to defend and hold harmless H-GAC, its board members, officers, agents, officials, employees, and indemnities from any and all claims, costs, expenses (including reasonable attorney fees), actions, causes of action, judgements, and liens arising as a result of Contractor's negligent act or omission under this Master Agreement. Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against Contractor relating to this Master Agreement.

ARTICLE 38: LIMITATION OF CONTRACTOR'S LIABILITY

Except as specified in any separate writing between the Contractor and an END USER, Contractor's total liability under this Master Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, but excluding its obligation to indemnify H-GAC, is limited to the price of the particular products/services sold hereunder, and Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. In no event will Contractor be liable for any loss of use, loss of time, inconvenience, commercial loss, loss of profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor understands and agrees that it shall be liable to repay and shall repay upon demand to END USER any amounts determined by H-GAC, its independent auditors, or any agency of State or Federal government to have been paid in violation of the terms of this Master Agreement.

ARTICLE 39: TITLES NOT RESTRICTIVE

The titles assigned to the various Articles of this Master Agreement are for convenience only. Titles shall not be considered restrictive of the subject matter of any Article, or part of this Master Agreement.

ARTICLE 40: JOINT WORK PRODUCT

This Master Agreement is the joint work product of H-GAC and the Contractor. This Master Agreement has been negotiated by H-GAC and the Contractor and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against any party.

ARTICLE 41: PROCUREMENT OF RECOVERED MATERIAL

H-GAC and the Respondent must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include: (1) procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; (2) procuring solid waste management services in a manner that

maximizes energy and resource recovery; and (3) establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines. Pursuant to the Federal Rule above, as required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6962(c)(3)(A)(i)), Respondent certifies that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the Contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

ARTICLE 42: COPELAND “ANTI-KICKBACK” ACT

Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into the contract. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as appropriate agency instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses. A breach of the contract clauses above may be grounds for termination of the Contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

ARTICLE 43: DISCRIMINATION

Respondent and any potential subcontractors shall comply with all Federal statutes relating to nondiscrimination. These include, but are not limited to:

- a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of race, color, or national origin;
- b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex;
- c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps;
- d) The Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101- 6107), which prohibits discrimination on the basis of age;
- e) The Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse;
- f) The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism;
- g) Sections 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records;
- h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental, or financing of housing;
- i) Any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and
- j) The requirements of any other nondiscrimination statute(s) that may apply to the application.

ARTICLE 44: DRUG FREE WORKPLACE

Contractor must provide a drug-free workplace in accordance with the Drug-Free Workplace Act, as applicable. For the purposes of this Section, “drug-free” means a worksite at which employees are prohibited from engaging in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance. H-GAC may request a copy of this policy.

ARTICLE 45: APPLICABILITY TO SUBCONTRACTORS

Respondent agrees that all contracts it awards pursuant to the contract awarded as a result of this Master Agreement will be bound by the foregoing terms and conditions.

ARTICLE 46: WARRANTY AND COPYRIGHT

Submissions must include all warranty information, including items covered, items excluded, duration, and renewability. Submissions must include proof of licensing if using third party code for programming.

ARTICLE 47: DATA HANDLING AND SECURITY

It will always be the responsibility of the selected Contractor to manage data transfer and to secure all data appropriately during the project to prevent unauthorized access to all data, products, and deliverables.

ARTICLE 48: DISPUTES

All disputes concerning questions of fact or of law arising under this Master Agreement, which are not addressed within the Whole Master Agreement as defined pursuant to Article 4 hereof, shall be decided by the Executive Director of H-GAC or his designee, who shall reduce his decision to writing and provide notice thereof to the Contractor. The decision of the Executive Director or his designee shall be final and conclusive unless, within thirty (30) days from the date of receipt of such notice, the Contractor requests a rehearing from the Executive Director of H-GAC. In connection with any rehearing under this Article, the Contractor shall be afforded an opportunity to be heard and offer evidence in support of its position. The decision of the Executive Director after any such rehearing shall be final and conclusive. The Contractor may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a court of competent jurisdiction. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Master Agreement and in accordance with H-GAC's final decision.

ARTICLE 49: CHOICE OF LAW: VENUE

This Master Agreement shall be governed by the laws of the State of Texas. Venue and jurisdiction of any suit or cause of action arising under or in connection with the Master Agreement shall lie exclusively in Harris County, Texas. Disputes between END USER and Contractor are to be resolved in accordance with the law and venue rules of the state of purchase. Contractor shall immediately notify H-GAC of such disputes.

ARTICLE 50: ORDER OF PRIORITY

In the case of any conflict between or within this Master Agreement, the following order of priority shall be utilized: 1) General Provisions, 2) Special Provisions, 3) Scope of Work, and 4) Other Attachments.

ARTICLE 51: WHOLE MASTER AGREEMENT

Please note, this is an H-GAC Master Agreement template and is used for all products and services offered in H-GAC Cooperative Purchasing. Any redlines to this Master Agreement may not be reviewed. If this Master Agreement has not been signed by the Contractor within 30 calendar days, this Master Agreement will be automatically voided. The Master General Provisions, Master Special Provisions, and Attachments, as provided herein, constitute the complete Master Agreement between the parties hereto, and supersede any and all oral and written Master Agreements between the parties relating to matters herein. Except as otherwise provided herein, this Master Agreement cannot be modified without written consent of the parties.

ARTICLE 52: UNIVERSAL IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT (SAM)

In accordance with 2 CFR Title 2, Subtitle A, Chapter I, Part 25 as it applies to a Federal awarding agency's grants, cooperative agreements, loans, and other types of Federal financial assistance as defined in 2 CFR 25.406. Contractor understands and as it relates to 2 CFR 25.205(a), a Federal awarding agency may not make a Federal award or financial modification to an existing Federal award to an applicant or recipient until the entity has complied with the requirements described in 2 CFR 25.200 to provide a valid unique entity identifier and maintain an active SAM registration (www.SAM.gov) with current information (other than any requirement that is not applicable because the entity is exempted under § 25.110). 2 CFR 25.200(b) requires that registration in the SAM **prior to submitting an application or plan**; and maintain an active SAM registration with current information, including information on a recipient's immediate and highest level owner and subsidiaries, as well as on all predecessors that have been awarded a Federal contract or grant within the last three years, if applicable, at all

times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency; and provide its unique entity identifier in each application or plan it submits to the Federal awarding agency. To remain registered in the SAM database after the initial registration, the applicant is required to review and update its information in the SAM database on an annual basis from the date of initial registration or subsequent updates to ensure it is current, accurate and complete. At the time a Federal awarding agency is ready to make a Federal award, if the intended recipient has not complied with an applicable requirement to provide a unique entity identifier or maintain an active SAM registration with current information, the Federal awarding agency: (1) May determine that the applicant is not qualified to receive a Federal award; and (2) May use that determination as a basis for making a Federal award to another applicant.

ARTICLE 53: PROCUREMENT OF RECOVERED MATERIALS

In accordance with 2 CFR 200.323, the Houston-Galveston Area Council and the Contractor or Subrecipient must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include: (1) procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; (2) procuring solid waste management services in a manner that maximizes energy and resource recovery; and (3) establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines. Pursuant to the Federal Rule above, as required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6962(c)(3)(A)(i)), the Contractor or Subrecipient certifies that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the Agreement will be at least the amount required by the applicable contract specifications or other contractual requirements.

SIGNATURES:

H-GAC and the Contractor have read, agreed, and executed the whole Master Agreement as of the date first written above, as accepted by:

Skeeter Emergency Vehicles, LLC

Signature  DocuSigned by:
B2D885F9B5D14E7...

Name Jeff Doran

Title Director - Order Mangement

Date 12/11/2023

H-GAC

Signature  DocuSigned by:
82EC270D5D61423...

Name Chuck Wemple

Title Executive Director

Date 12/12/2023

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF SHAWNEE, OKLAHOMA APPROVING THE PURCHASE OF A FORD F550 SKEETER RESCUE, FROM CONRAD FIRE EQUIPMENT UNDER THE COOPERATIVE PURCHASING AGREEMENT WITH HOUSTON-GALVESTON AREA COUNCIL.

WHEREAS, the City of Shawnee desires to enter into a Cooperative Purchasing Agreement with Houston-Galveston Area Council for the purchase of a Ford F550 Skeeter Rescue from Conrad Fire Equipment under Cooperative Agreement 11629 - FS12 - 23; and

WHEREAS, said Cooperative Purchasing Agreement is for an item and/or service that no bid or match on the product or service is listed on the procurement schedule provided by the State of Oklahoma Use Committee; and

WHEREAS, all competitive bidding requirements of the Oklahoma Central Purchasing Act were followed when the pricing was obtained by the cooperative purchasing procurement unit and said pricing is reflected in the Cooperative Purchase Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Commission of the City of Shawnee, that in accordance with Oklahoma law, and the policy of the City of Shawnee, the Cooperative Purchasing Agreement identified herein is approved in the amount of Three Hundred Twenty-Three Thousand Eight Hundred Sixty-Seven Dollars and Ninety-Nine Cents (\$323,867.99).

PASSED, APPROVED AND ADOPTED this 21st day of January 2025, by the Mayor and City Commission.

ERIC STEPHENS, MAYOR

ATTEST (SEAL):

LISA LASYONE, MMC
CITY CLERK



City Manager Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: Andrea Weckmueller-Behringer, City Manager
Subject: Consideration of renewal contract with Latham Consulting Group and Dunnington Consulting for legislative consulting services. *(Deferred from the December 16, 2024, regular meeting.)*

Background: In October 2021, the City of Shawnee first engaged Dunnington Consulting and Latham Consulting for governmental and community affairs services. Over the past three years, the City of Shawnee has worked closely with these consultants to help build important relationships between City staff, state agencies and elected officials as well as to identify and advocate for grant opportunities benefiting the community.

Another key service provided by the consultants is the active monitoring of state legislative activities and the alerting of City staff regarding potential legislation that could impact City operations and the residents of Shawnee. By having this early notice and review, City staff is able to talk through challenges and opportunities with state lawmakers to ensure that Shawnee's voice is heard.

Financial Impact: As budgeted; \$60,000 from General Fund, City Manager's Department, Other Contractual Services, 001-5-0110-53390

Attachments: Dunnington-Latham Consulting Contract 2024-2025

Staff Recommendation: Approval of the item

CONSULTING AGREEMENT

THIS AGREEMENT is made and entered into as of December ____, 2024, by and between Dunnington Consulting, and Latham Consulting an Oklahoma limited liability company, (“Consultant”) and the City of Shawnee, Oklahoma (“Client”).

RECITALS

A. Client is an Oklahoma Municipal Corporation, and Consultant has expertise related to the State of Oklahoma and its laws, regulations, and governmental agencies.

B. Client desires to retain the services of Consultant, and Consultant desires to render those services to Client.

In consideration of the mutual covenants contained in this agreement, the parties agree as follows:

1. Retention of Services. Client hereby appoints and retains the services of Consultant to provide the consulting services set forth on Exhibit A (the “Services”). Consultant accepts such appointments.

2. Term. This Agreement shall commence on the date hereof and shall continue for a period of 1 year.

3. Compensation and Billing. As compensation for the Services, Client shall pay Consultant in accordance with Exhibit B.

4. Reimbursement of Expenses. Client shall reimburse Consultant for all reasonable expenses incurred by Consultant in connection with the performance of the Services, including but not limited to filing and registration costs, meals, travel, and entertainment expenses, and copies and postage.

5. Representations, Warranties, and Covenants by Consultant. Consultant represents and warrants to, and covenants with, Client as follows:

(a) Consultant has obtained all licenses, permits, and approvals necessary for Consultant to perform the Services hereunder.

(b) Consultant will comply with all applicable laws, rules, and regulations in the performance of the Services.

6. Termination.

(a) In General. This Agreement may be terminated in any of the following events.

(i) By mutual agreement of the parties;

(ii) By either party, without cause, on 45 days' prior written notice to the other party; or

(i) By reason of material breach, as provided hereafter.

(b) Termination for Material Breach. If either party defaults by the failure to comply in all material respects with the terms of this Agreement, the other party may terminate this Agreement upon fifteen (15) days prior written notice to the defaulting party, unless the defaulting party cures such default within the 15-day period. This provision shall not constitute an election of remedies by either party, and each party shall have and retain all rights to damages at law and rights to equitable relief in the event of breach by the other party.

(c) On Termination. Upon termination of this Agreement, Client shall pay Consultant for Services rendered through the date of termination. Neither party shall have any further obligation to the other except for (i) obligations accruing prior to the date of termination, and (ii) obligations contained in this Agreement that are expressly made or otherwise contemplated to extend beyond the term of this Agreement.

7. Indemnification.

(d) By Consultant. Consultant shall indemnify and hold harmless Client and its employees, directors, officers, managers, members, shareholders, agents, and affiliates from and against any and all liability, claims, demands, costs, actions, and expenses, including reasonable attorneys' fees, which may result from or arise in connection with (i) the failure by Consultant, its employees, or agents to perform their obligations in accordance with this Agreement, or (ii) the negligent or intentional acts or omissions of Consultant, its employees, or agents.

(e) By Client. Client shall indemnify and hold harmless Consultant and its employees, directors, officers, agents, and affiliates from and against any and all liability, claims, demands, costs, actions, and expenses, including reasonable attorneys' fees, which may result from or arise in connection with (i) the failure by Client, its employees, or agents to perform their obligations in accordance with this Agreement, (ii) the negligent or intentional acts or omissions of Client, its employees, or agents.

8. Relationship between Parties. Consultant will furnish the Services as an independent contractor and not as an employee of Client. Except as required by this Agreement, Consultant shall be free to dispose of such portion of Consultant's time, energy, and skill which Consultant is not requested to devote hereunder to Client in such manner as Consultant sees fit to such persons, firms, or corporations as Consultant deems advisable. Consultant has no power or authority to bind Client in any manner. Consultant shall not by virtue of this Agreement be deemed to be partners or joint venturers.

9. Disclaimer of Warranties. Consultant agrees to put forth a good faith effort as it relates to time and talent to accomplish the stated legislative and governmental objectives of Client. It is mutually agreed and understood that Consultant cannot and does not either expressly or impliedly guarantee or warrant the results of Client's efforts.

10. Notices. Any and all notices, consents, or other communications by one party intended for the other shall be deemed to have been properly given if in writing and personally delivered, transmitted by electronic means, or deposited in the United States first class mails, postpaid, to the addresses or numbers set forth below the signatures of the parties.

2. General. The invalidity or unenforceability of any provision of this Agreement will not affect the validity or enforceability of any other provision. Neither party may assign its rights or delegate its duties under this Agreement without the prior written consent of the other. This Agreement shall be binding upon, and shall inure to the benefit of, the parties and their respective legal representatives, successors and permitted assigns. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Oklahoma. No right or remedy conferred in this Agreement upon or reserved to either Client or Consultant is intended to be exclusive of any other right or remedy. Each and every right and remedy shall be cumulative and in addition to any other right or remedy provided in this Agreement. The failure of Client or Consultant to insist upon the strict observance or performance of any of the provisions of this Agreement or to exercise any right or remedy shall not impair any such right or remedy or be construed as a waiver or relinquishment thereof with respect to subsequent defaults. This Agreement is not intended to confer any right or benefit upon, or permit enforcement of any provision by, any patient or any person other than the parties to this Agreement.

11. Entire Agreement. This Agreement and its exhibits constitute the entire understanding and agreement of the parties with respect to its subject matter and cannot be changed or modified except by another agreement in writing signed by all parties.

[SIGNATURE PAGE FOLLOWS]

CONSULTANT:

DUNNINGTON CONSULTING, LLC

By_____

Name: Jason Dunnington

Title: President

Address: 220 NW 13th St Suite #6

Oklahoma City, OK 73103

Email: jason@dunningtonconsulting.com

Fax: _____

CLIENT:

THE CITY OF SHAWNEE

By_____

Name: Andrea Weckmueller-Behringer

Title: City Manager

Address: 16 W. 9th Street

Shawnee, OK 74801

Email: Andrea.Weckmueller-Behringer@shawneecok.org

Fax: _____

EXHIBIT A

Services

- Assist, inform, and advise Client regarding Client's legislative agenda in Oklahoma
- Work with Client on legislation during the 2025 OK Legislative Session as well as track bills and work against legislation deemed harmful to Client's cause.
- Help with managing coalitions and long-term planning.
- Assist and develop strategic relationships between The City of Shawnee and legislative and community leaders
- Periodically meet with representatives and update representatives of Client to discuss Client's objectives and progress on legislation or other strategic plans

EXHIBIT B

Compensation

Dunnington Consulting will charge a monthly retainer of \$5,000 per month or \$15,000 per quarter depending on the desired billing of the client.



Engineering Department
222 N. Broadway Ave.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: Board of City Commissioners
From: Seth Barkhimer, Director of Engineering
Subject: North Midland Addition Water Line Replacement (Award)

Background: In April of 2024, the City of Shawnee entered into a Professional Services Agreement with Freese and Nichols for the final design of the Midland Addition Water Line Replacement project. With design complete, the project was advertised, and staff opened bids on January 14, 2025.

City staff and the Freese and Nichols design team have reviewed the bid proposals. Nine (9) bids were received, and the base bids ranged from \$387,265.45 (low) to \$712,804 (high). The design estimate for the Base Bid, prior to the bid opening, was \$631,128.

Staff recommends awarding the base bid to NPL Construction, who submitted the lowest bid.

Financial Impact: \$387,265.45; from American Rescue Plan Act (ARPA) Fund, Water Distribution, Capital Outlay - Buildings & Improvements, 304-5-1040-54200; Proj. No. 24-0810-16

Attachments: SWN24262 - IFB PLANS, SWN24262 - IFB SPECS, Notice to Bidders - Signed, Planholder's List - Midland Water Line Project, SWN24262 - N Midland Addition Recommendation of Award

Staff Recommendation: Award of the Contract

CITY OF SHAWNEE
SHAWNEE MUNICIPAL AUTHORITY
N. MIDLAND ADDITION
WATER LINE REPLACEMENT



PROJECT VICINITY MAP

SHEET INDEX		
SHEET NUMBER	SHEET TITLE	SEQUENCE
GN-1	COVER	
GN-2	GENERAL NOTES	2
GN-3	SUMMARY OF QUANTITIES	3
GN-4	SURVEY CONTROL	4
C-1	BEGIN TO STA. 4+50	5
C-2	STA. 4+50 TO 9+00	6
C-3	STA. 9+00 TO END	7
DT-1	CONSTRUCTION DETAIL I	8
DT-2	CONSTRUCTION DETAIL II	9
DT-3	CONSTRUCTION DETAIL III	10
DT-4	CONSTRUCTION DETAIL IV	11
DT-5	CONSTRUCTION DETAIL V	12
DT-6	CONSTRUCTION DETAIL VI	13
TC-1	TRAFFIC CONTROL	14

DECEMBER 2024



3600 NW 138th St., Suite 202
Oklahoma City, OK 73134
Phone - (405) 607-7060
Web - www.freese.com
Certificate of Authorization: CA#511
Expiration Date: 06/30/2026

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
AUTHORIZED BY: JONATHAN CHARLES FAUGHTENBERRY P.E.
OKLAHOMA NO: 28605
DATE: 12/11/2024
THE SEALED, SIGNED AND DATED DOCUMENTS
ARE MAINTAINED IN THE OFFICE OF FREESE AND
NICHOLS AND MAY BE REVIEWED UPON REQUEST.

GENERAL NOTES (CONTINUED)

21. CUTTING AND PLUGGING OF ALL EXISTING WATER LINES SHALL TAKE PLACE AFTER THE NEW WATER LINES ARE FULLY OPERATIONAL.
 22. THE CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN THE HORIZONTAL PIPELINE ALIGNMENT SO LONG AS THE CENTERLINE ALIGNMENT OF THE PIPELINE IS WITHIN TWO (2) FEET EITHER SIDE OF THE CENTERLINE PIPE SHOWN ON THE PLANS, AND THE ADJUSTMENT IS APPROVED BY THE OWNER.
 23. ALL VALVES AND VALVE APPURTENANCES SHALL HAVE FACTORY-APPLIED FUSION-BONDED EPOXY COATED WHICH MEETS AWWA C550.
 24. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY OMISSIONS, DISCREPANCIES, OR DIMENSIONAL ERRORS PRIOR TO BEGINNING OR FABRICATING ANY WORK, OTHERWISE THE CORRECTIONS (AND ASSOCIATED COST) WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 25. THE DESIGN, INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION MEASURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY THROUGHOUT ALL PHASES OF CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE ODEQ REGULATIONS CONCERNING EROSION AND SEDIMENT CONTROL.
 26. ALL STORM WATER POLLUTION PREVENTION MEASURES SHALL CONFORM FOR COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM REQUIREMENTS. THE CONTRACTOR SHALL CONTROL EROSION AND SEDIMENTATION PER THE APPLICABLE LAWS AND REGULATIONS.
 27. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS, DRIVEWAYS, AND SIDEWALKS ADJACENT TO THE PROJECT FREE OF MUD AND DEBRIS FROM THE CONSTRUCTION.
 28. THE CONTRACTOR IS RESPONSIBLE FOR ALL JOB SITE SAFETY AND SHALL BE RESPONSIBLE FOR PREPARING A TRENCH SAFETY PLAN FOR THIS PROJECT.
 29. THE LOCATION OF ALL UNDERGROUND PIPING, FRANCHISE UTILITIES AND OTHER UNDERGROUND STRUCTURES AND UTILITIES ARE BASED ON EITHER ORIGINAL CONSTRUCTION PLANS AND/OR LIMITED FIELD SURVEY. THE CITY OF SHAWNEE NOR ENGINEER ASSUME RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE FACILITIES OR TO SHOW THEM IN THEIR EXACT LOCATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL AFFECTED UTILITIES, WHETHER OR NOT THEY ARE SHOWN ON THE PLANS, TO VERIFY THE MATERIALS, LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION OR PURCHASE OF MATERIAL AND TO PROVIDE ALL NECESSARY PIPE, FITTINGS AND APPURTENANCES TO MAKE ALL CONNECTIONS AS SHOWN IN THESE PLANS. SUCH VERIFICATION SHALL BE CONSIDERED SUBSIDIARY TO THE COST OF THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE MADE.
 30. DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ADJUSTMENTS TO FRANCHISE UTILITIES SHOULD BE MADE BY THE APPROPRIATE UTILITY COMPANY TO MEET THE DESIGN OF THIS PROJECT.
 31. CONTRACTOR SHALL PROVIDE THE NECESSARY APPURTENANCES TO ADEQUATELY PERFORM A PRESSURE TEST AND DISINFECT THE LINES.
 32. THE PLAN SHEETS DO NOT ATTEMPT TO SHOW THE LOCATION OF ALL JOINTS AND CLOSURE SECTIONS WHICH MAY BE NECESSARY IN ORDER TO CONSTRUCT THE PIPING OR ACCOMPLISH PARTICULAR PHASING OF THE WORK. THE CONTRACTOR SHALL MAKE THE DETERMINATION IF AND WHERE ADDITIONAL JOINTS OR CLOSURE SECTIONS ARE REQUIRED AND INCORPORATE THEM AS NECESSARY, AT NO ADDITIONAL COST.
 33. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.
 34. THE CONTRACTOR SHALL DISINFECT THE NEW WATER MAINS IN ACCORDANCE WITH AWWA STANDARD C651, THEN FLUSH AND SAMPLE THE LINES. OBTAIN SAFE BACTERIOLOGICAL SAMPLES ON TWO CONSECUTIVE DAYS BEFORE PLACING THE WATER LINE INTO SERVICE, IN ACCORDANCE WITH ODEQ TITLE 252, CHAPTER 626 (PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS), SUBCHAPTER 19.
 35. THE CONTRACTOR SHALL VIDEO ALL IMPACTED PROPERTY WITHIN THE CONSTRUCTION LIMITS PRIOR TO WORK. VIDEOS SHALL INCLUDE DATE NOTATION AND AUDIO IDENTIFICATION OF PROPERTY ADDRESS AND APPROXIMATE STATION NUMBER. THIS PRE CONSTRUCTION VIDEO TAPING OF IMPACTED PROPERTIES SHALL BE CONSIDERED SUBSIDIARY WORK. SUBMIT COPY OF VIDEO TO THE OWNER FOR APPROVAL PRIOR TO BEGINNING ANY CONSTRUCTION.
 36. ALL EXISTING WATER MAINS AND APPURTENANCES ABANDONED BY ANY PROJECT ARE TO REMAIN THE PROPERTY OF THE CITY OF SHAWNEE, AND SHALL BE SALVAGED FOR THE CITY WATER DEPARTMENT UNLESS SPECIFICALLY STATED OTHERWISE IN THE PLANS AND SPECS. CONTRACTOR TO DELIVER ANY SALVAGE ITEMS TO A LOCATION SPECIFIED BY THE OWNER WITHIN CITY LIMITS.
 37. PRESSURE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH OAC 252:626-19-2(E). LEAKING SHALL NOT EXCEED 10 GAL/INCH PER MILE PER 24 HOURS AT 150 PSI TESTING PRESSURE.
 38. ALL DIP FITTINGS TO HDPE PIPE CONNECTIONS ARE REQUIRED TO HAVE A STAINLESS STEEL STIFFENER RING INSTALLED.
- TRAFFIC AND ACCESS CONTROL NOTES
39. THE CONTRACTOR MAY USE EXISTING ROADS FOR TRANSPORTING MATERIAL AND EQUIPMENT. THE CONTRACTOR SHALL FOLLOW THE LAWS FOR ROAD WEIGHT RESTRICTIONS. DAMAGE CAUSED BY CONSTRUCTION VEHICLES IS THE RESPONSIBILITY OF THE CONTRACTOR.
 40. CONTRACTOR SHALL PROVIDE APPROPRIATE SIGNAGE, BARRICADES, FLAGMEN, ETC. REQUIRED TO MAINTAIN SAFE TRAFFIC FLOW AT ALL TIMES. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 41. CONTRACTOR WORK LIMITS SHALL BE RESTRICTED TO THE ROAD

- ## LEAD SERVICE LINE CONNECTIONS

- ON THE CUSTOMER SIDE OF THE METER, IF OBSERVABLE.
55. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF ANY LEAD MATERIAL OBSERVED, BUT LEFT IN PLACE (SUCH AS LEAD LINES, SOLDER OR FITTINGS AT THE METER OR ON THE CUSTOMER SIDE).
56. CONTRACTOR SHALL DOCUMENT THE SPECIFIC MATERIAL THAT IS INSTALLED WITH EACH LEAD SERVICE LINE REPLACEMENT.
57. ANY LEAD SERVICE LINES THAT ARE DETERMINED TO BE LEAD SERVICE LINES SHOULD BE PROPERLY RECYCLED AND/OR DISPOSED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR.

100% SUBMITTAL

SHEET	GN-2
SEQ.	2 OF 14

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QUANTITIES TABLE

SPECIFICATION	BASE BID DESCRIPTION	QUANTITY	UNIT
33 31 13.16	8" HDPE (DIPS) WATER LINE, DR 11 BY OPEN CUT	650	LF
33 05 23.33	14" STEEL CASING BY TRENCHLESS	400	LF
40 05 61	8" GATE VALVE, AWWA	3	EA
33 05 01.02	8"X8" TAPPING SLEEVE AND VALVE	2	EA
33 05 01.02	8"X6" TEE	2	EA
33 05 01.02	8" 90° BEND	1	EA
33 05 01.02	8" 45° BEND	2	EA
33 12 19	FIRE HYDRANT ASSEMBLY, INC. ISOLATION VALVE	2	EA
33 31 13.16	NEW LONG SIDE WATER SERVICE BY TRENCHLESS	5	EA
33 31 13.16	NEW SPECIALTY WATER SERVICE	10	EA
01 29 01	LEAD SERVICE LINE REMOVAL AND DISPOSAL	1	EA
32 92 00	BLOCK SODDING	1283	SY
02 41 00	CLEARING AND GRUBBING	1	LS
33 05 05.31	HYDROSTATIC TESTING AND DISINFECTION	1	LS
01 29 01	PREPARE AND IMPLEMENT SWPPP	1	LS
01 29 01	TRAFFIC CONTROL	1	LS
01 29 01	PROJECT SIGN	1	EA
01 29 01	CUT AND PLUG EXISTING WATER LINE	3	EA
33 05 23.33	CELLULAR CONCRETE FILL ABANDONED LINES	3.5	CY
32 01 29	CONCRETE PAVEMENT REPAIR	94	SY
32 01 29	CONCRETE DRIVEWAY REPAIR	187	SY
32 01 29	ASPHALT PAVEMENT REPAIR	77	SY
32 01 29	GRAVEL DRIVEWAY REPAIR	33	SY
01 29 01	8" CORRUGATED METAL CULVERT REPLACEMENT	70	LF
01 29 01	MOBILIZATION	1	LS
SPECIFICATION	ALLOWANCE DESCRIPTION	QUANTITY	UNIT
01 23 10	LANDSCAPING RESTORATION	1	LS

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
AUTHORIZED BY: ONATHAN TAUGHTENBERRY P.E.
CIVIL ENGINEER
DATE: 12/11/2024
THE SEALED, SIGNED AND DATED DOCUMENTS
ARE MAINTAINED IN THE OFFICE OF FREESE AND
NICHOLS AND MAY BE REVIEWED UPON REQUEST.

FREESE

NICHOLS

3600 NW 138th St., Suite 202
Oklahoma City, OK 73134
Phone - (405) 607-7060
Web - www.freese.com
Certificate of Authorization: CA#511
Expiration Date: 06/30/2026

CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY

N. MIDLAND ADDITION WATERLINE
REPLACEMENT

CIVIL

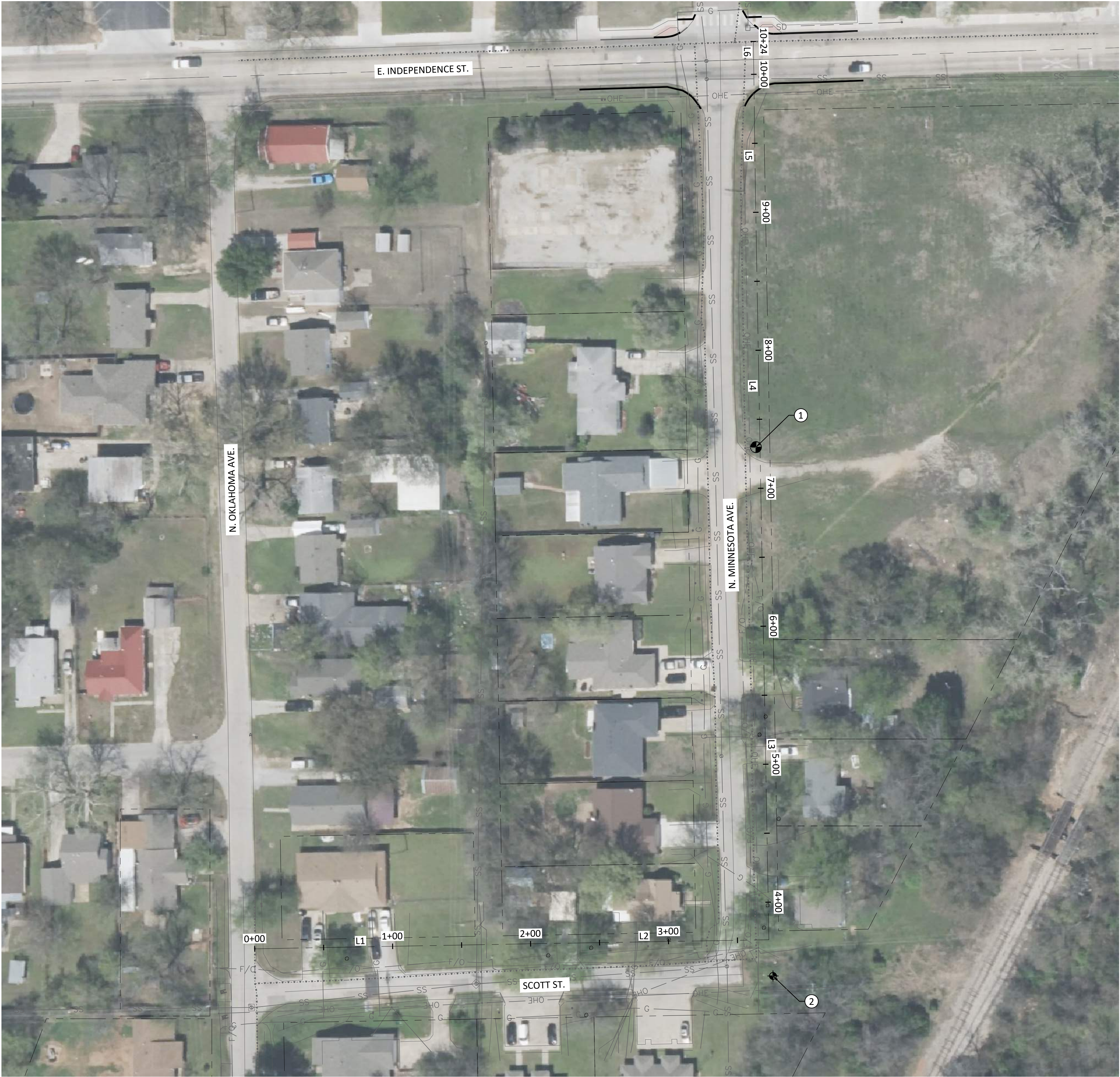
MIDLAND ADDITION WATERLINE
REPLACEMENT

NO.	ISSUE	BY	DATE	F&N JOB NO. SWN24262	DATE	10/17/2024
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					DRAWN	TEW
					CHECKED	JCF
					APPROVED	
VERIFY SCALE				FILE NAME	CV-ALL-GN-NOTE.dwg	
0				Bar Scale is one inch on original drawing. 1 if not one hinch on this sheet, adjust scale.		

GN-3

SEQ. 3 OF 14

100% SUBMITTAL



SURVEY CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	734387.98	2291359.91	1054.34	IPSC
CP-2	734004.80	2291372.22	1049.81	IPSC
CP-3	730940.17	2293039.71	1048.28	IPSC

* CP-3 NOT ON SHEET.

Line Table: Alignments				
Line #	Length	Direction	Start Point	End Point
L1	199.997	N88° 57' 20.09"E	(2290996.55,734024.46)	(2291196.51,734028.10)
L2	172.777	N89° 02' 00.04"E	(2291196.51,734028.10)	(2291369.27,734031.02)
L3	270.997	N1° 01' 57.82"W	(2291369.27,734031.02)	(2291364.38,734301.97)
L4	270.997	N1° 01' 57.82"W	(2291364.38,734301.97)	(2291359.50,734572.92)
L5	54.375	N0° 46' 23.56"W	(2291359.50,734572.92)	(2291358.76,734627.30)
L6	54.631	N0° 46' 23.56"W	(2291358.76,734627.30)	(2291358.03,734681.92)



100% SUBMITTAL

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
AUTHORIZED BY: JONATHAN TAUGHTENBERRY P.E.
DATE: 12/11/2024
THE SEALED, SIGNED AND DATED DOCUMENTS
ARE MAINTAINED IN THE OFFICE OF FREESE AND
NICHOLS AND MAY BE REVIEWED UPON REQUEST.



3600 NW 138th St., Suite 202
Oklahoma City, OK 73134
Phone - (405) 607-7060
Web - www.freese.com
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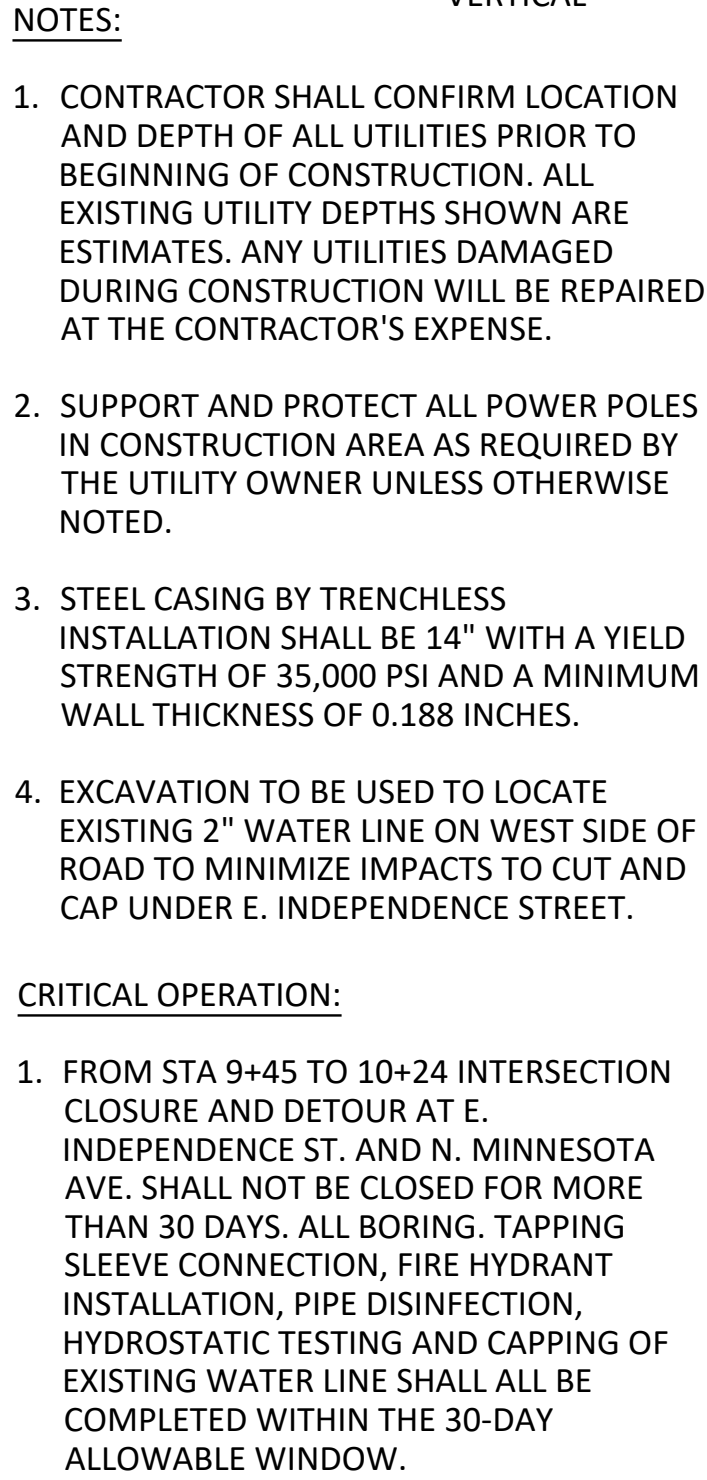
CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY
N. MIDLAND ADDITION WATERLINE
REPLACEMENT

CIVIL

SURVEY CONTROL

NO.	ISSUE	BY	DATE	F&N JOB NO.
				SWN24262
				DATE 10/17/2024
				DESIGNED MFL
				DRAWN TEW
				CHECKED
				APPROVED JCF
				FILE NAME
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SHEET	GN-4
SEQ.	4 OF 14



CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY
N. MIDLAND ADDITION WATERLINE
REPLACEMENT

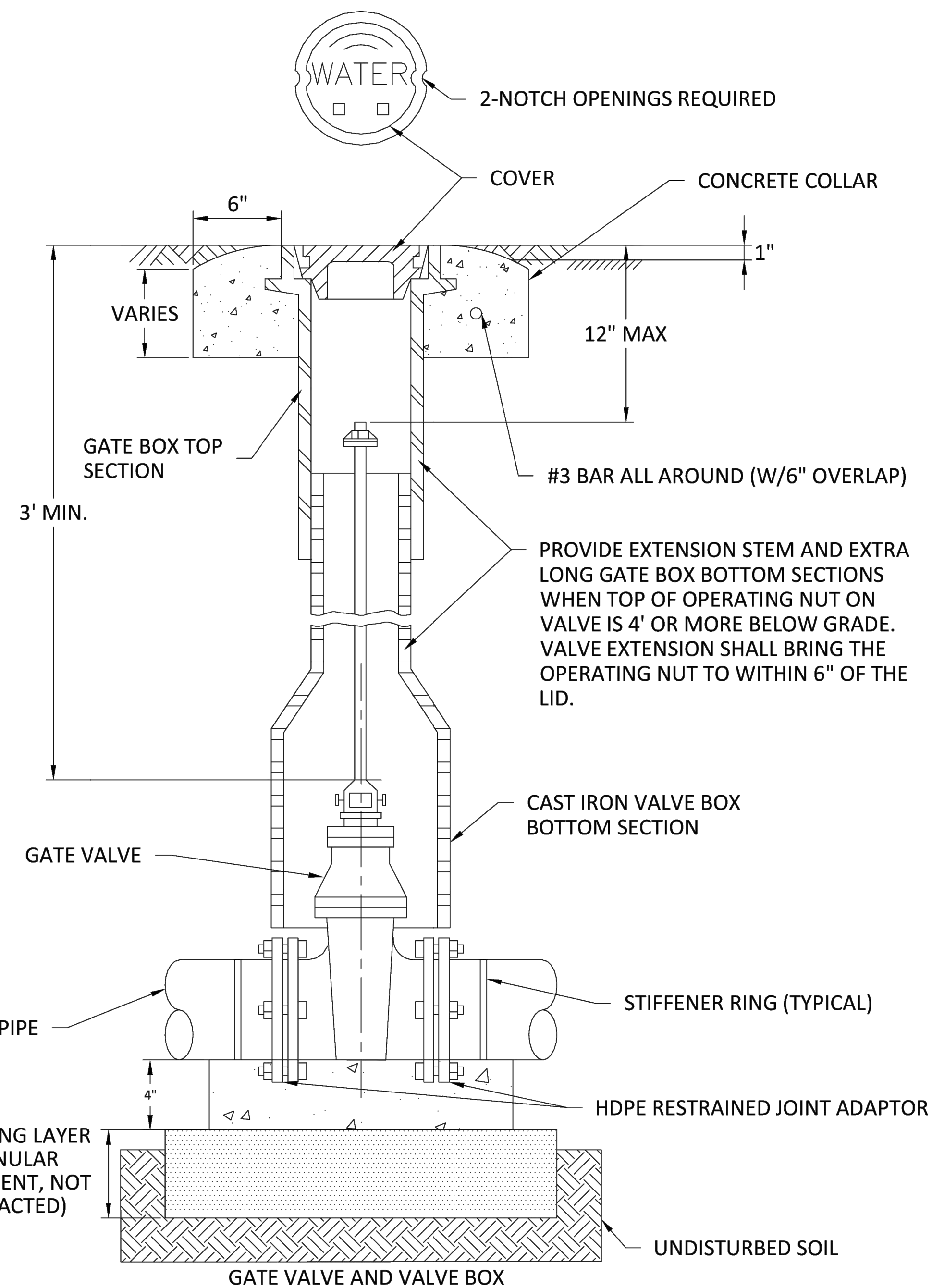
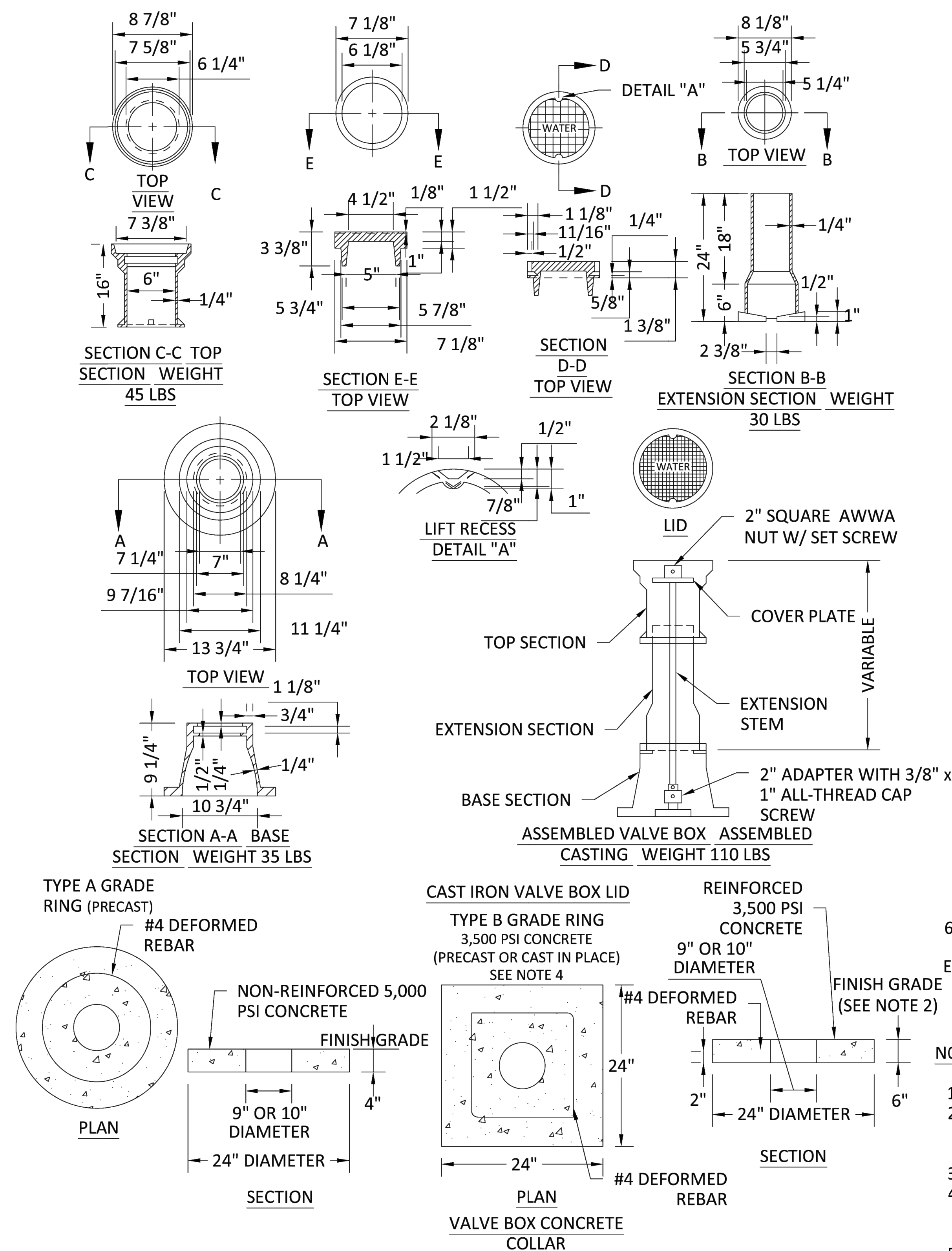
CIVIL

CONSTRUCTION DETAILS

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				SWN24262
				DATE 10/17/2024
				DESIGNED MILL
				DRAWN TEWF
				CHECKED JCF
VERIFY SCALE	Bar Scale is one inch on original drawing.			APPROVED
0	1			FILE NAME
				CV-ALL-GN-DETAIL.dwg
				Scale

DT-1

SEQ.	8 OF 14
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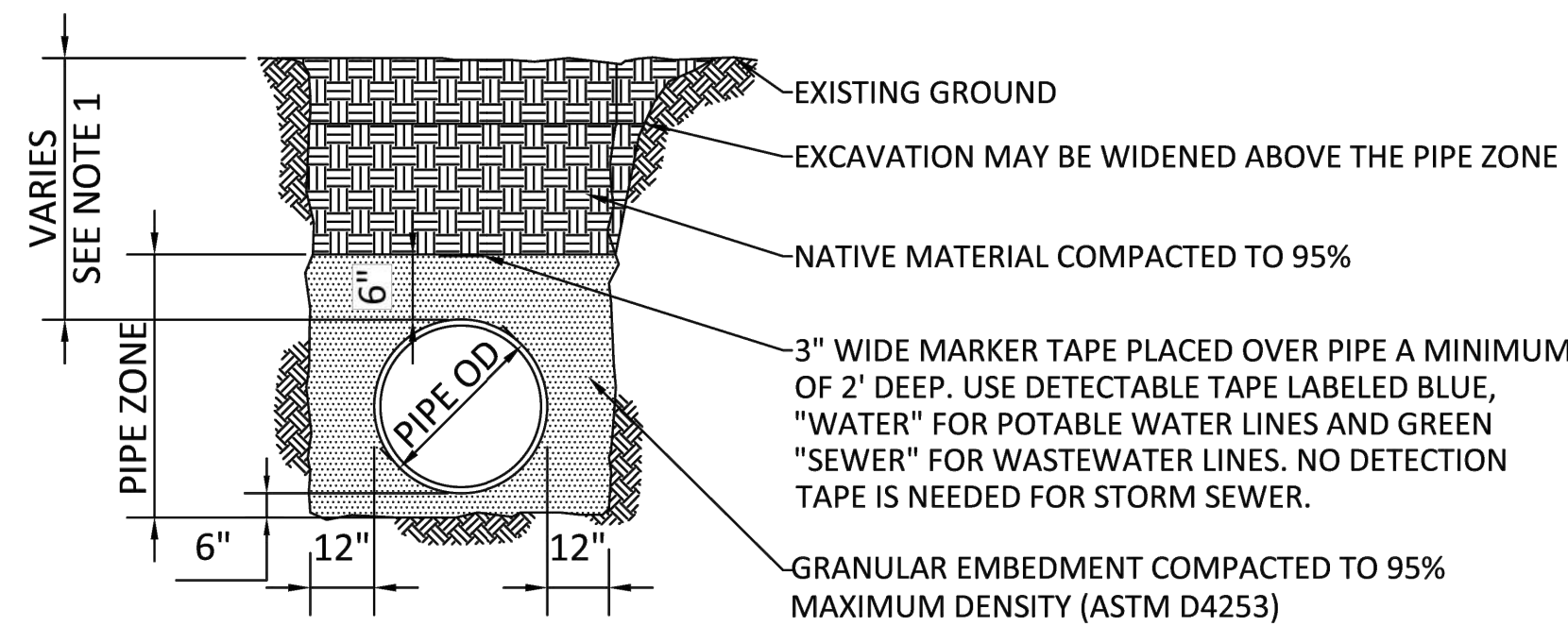


NOTES:

1. NO PVC VALVE BOX SHALL BE USED.
2. CONTRACTOR TO PLACE TYPE A OR TYPE B CONCRETE GRADE RING AROUND EACH BOX AFTER FINAL GRADING HAS BEEN COMPLETED AND TRENCHES HAVE SETTLED. CONTRACTOR TO ADJUST ACCORDINGLY UNTIL END OF WARRANTY PERIOD.
3. CONCRETE GRADE RING TYPE B SHALL BE USED IN PAVEMENT AREAS. THICKNESS SHALL BE 6" MIN.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A "W" INTO THE CONCRETE OF THE CURB TO DELINEATE THE LOCATION OF WATER SERVICES ALONG THE STREET, AND MARK A "V" TO DELINEATE THE LOCATION OF WATER MAIN VALVES.
5. ALL GATE VALVES SHALL BE OPEN BY TURNING COUNTERCLOCKWISE WITH STANDARD OPERATING NUT.

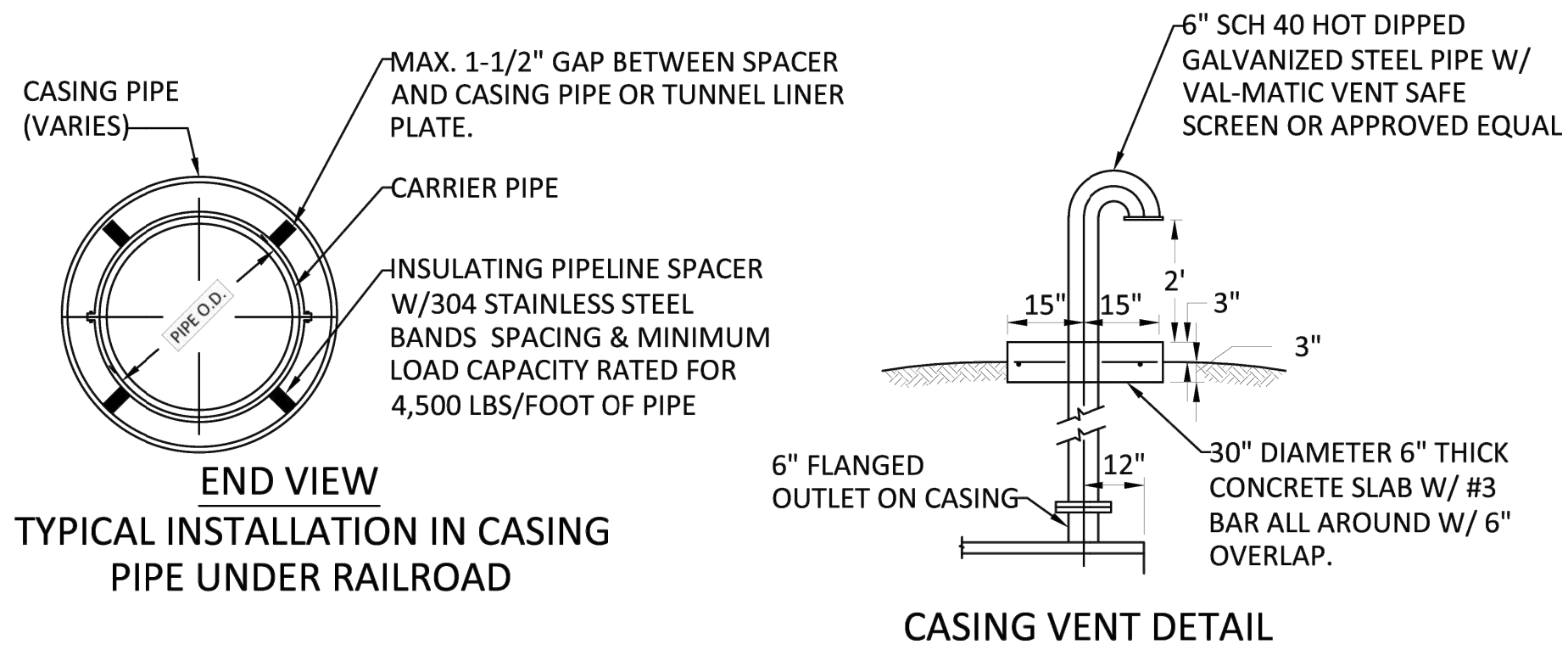
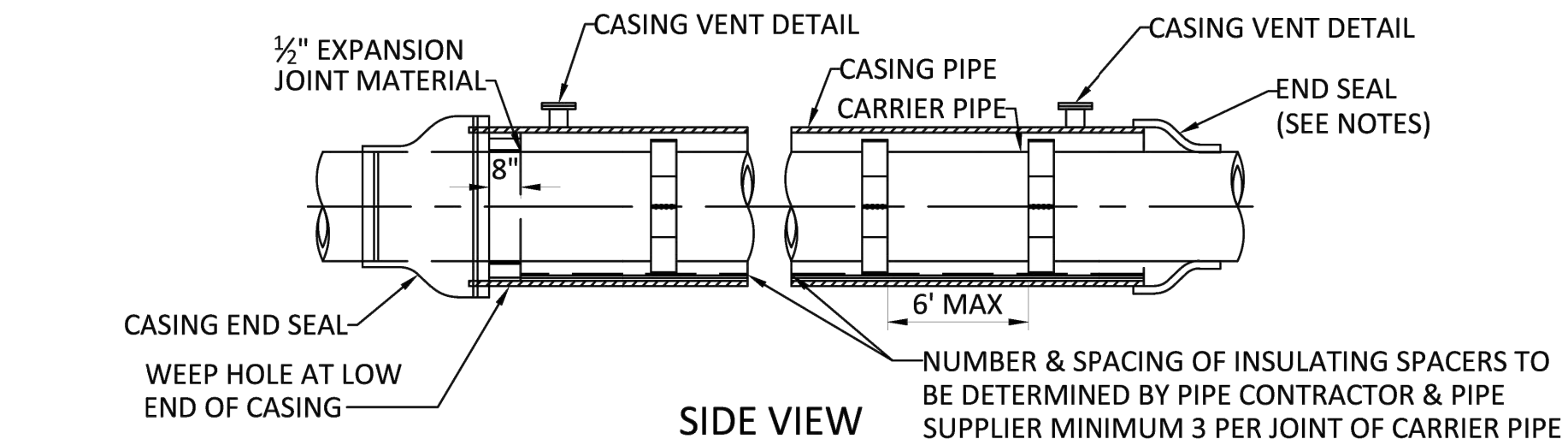
GATE VALVE AND VALVE BOX WITH CONCRETE GRADE RING

NOT TO SCALE



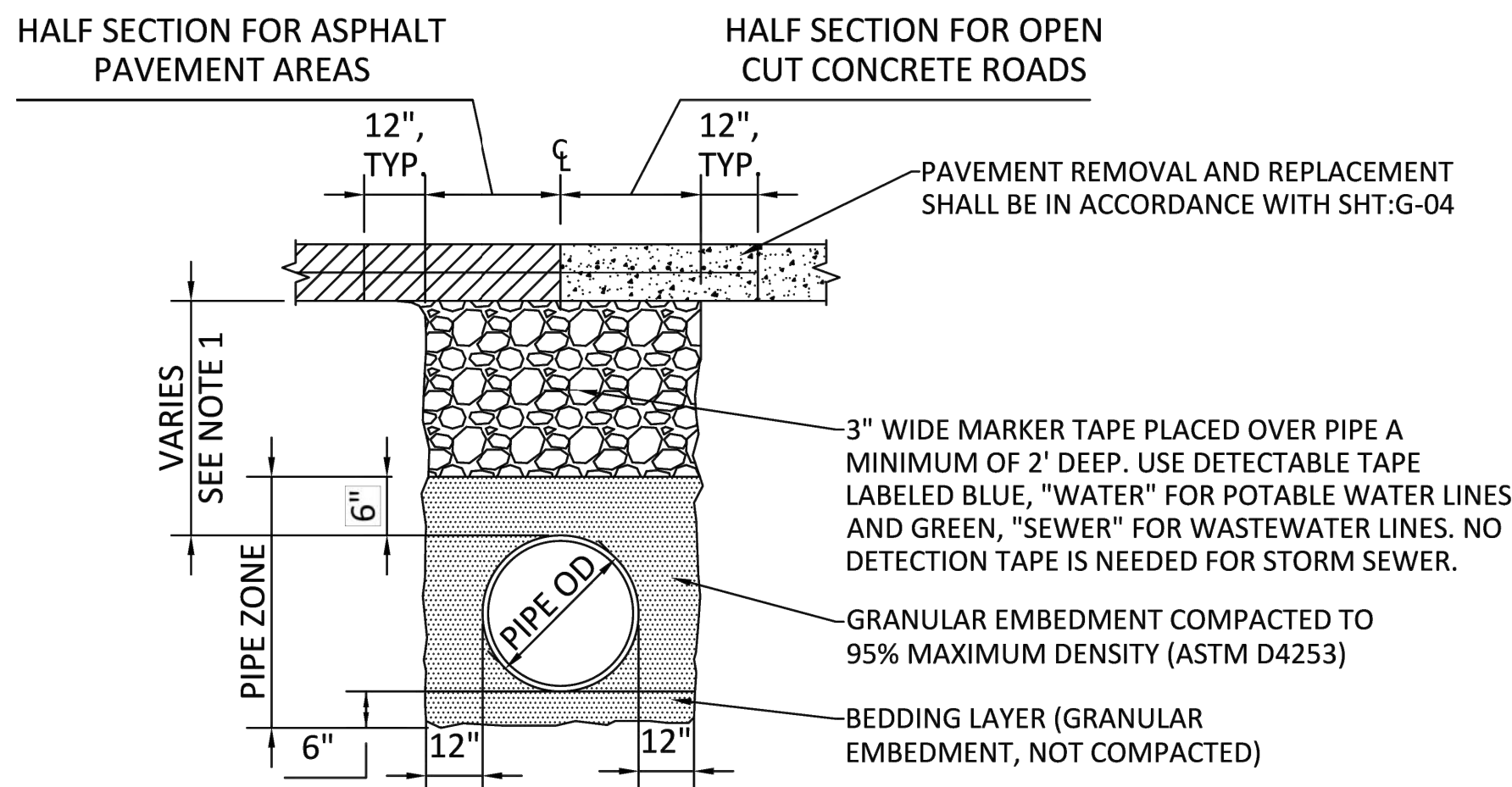
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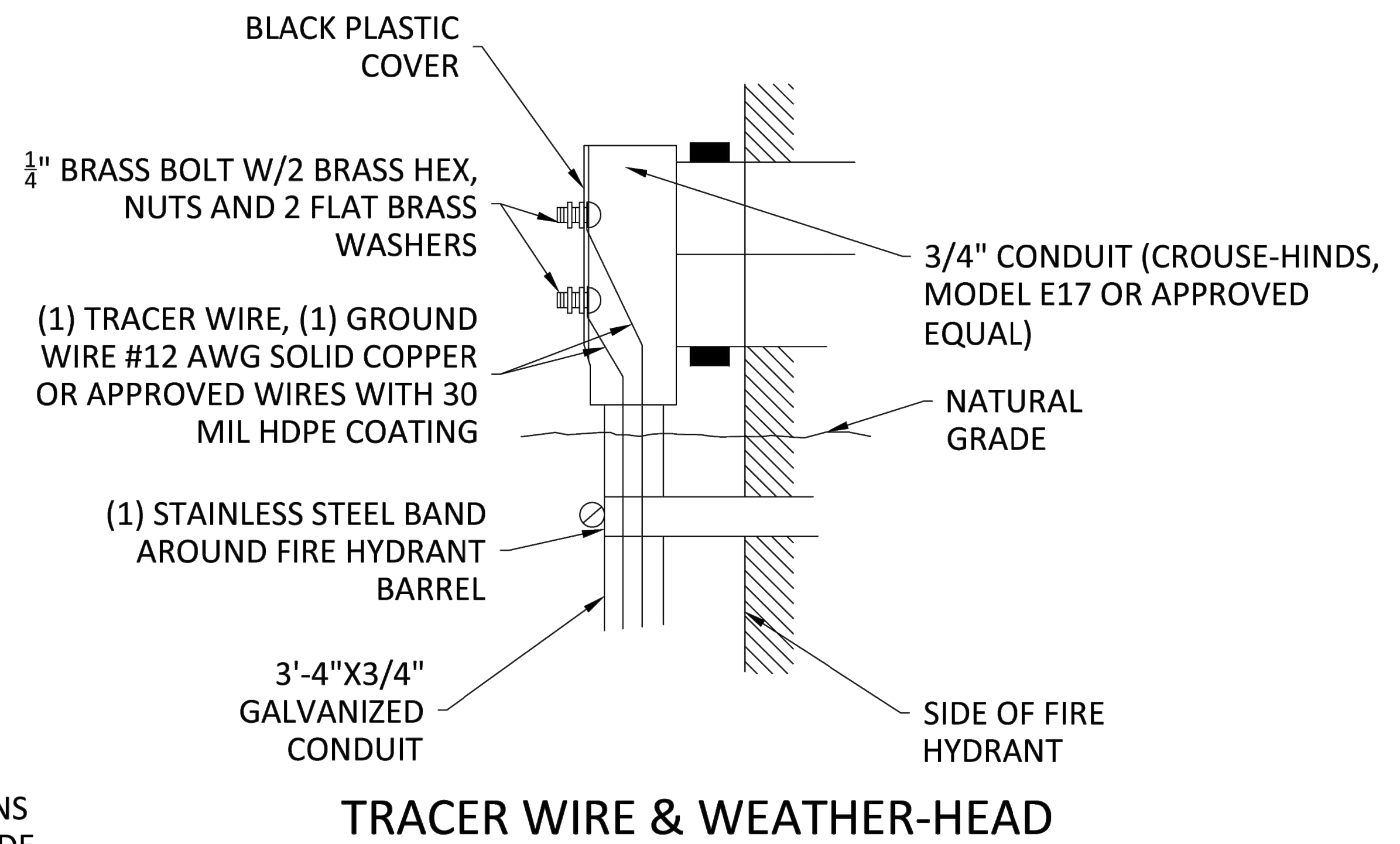
1. THE MINIMUM DEPTH OF EARTH COVER IS 30" FOR SANITARY SEWER, 2' FOR STORM SEWER, AND 4' FOR WATER LINES. IF 2' OF COVER CANNOT BE ACHIEVED FOR STORM SEWER, CLASS IV PIPE SHALL BE REQUIRED.
2. NATIVE MATERIAL BACKFILL CONSISTED OF EXCAVATED MATERIAL SHALL BE FREE OF ROCK LARGER THAN 2-1/2", ORGANIC MATERIAL, RUBBISH DEBRIS, AND OTHER OBJECTIONABLE MATERIAL.



NOTES:

1. CASING SIZE SHOULD BE 1.5X OD FOR ALL MECHANICAL JOINT OR BELL AND SPIGOT PIPE AND OD +2" CLEARANCE FOR FUSED PIPES. IF CALCULATED SIZE IS NOT STANDARD, ALL CASING SIZES SHALL BE ROUNDED UP TO THE NEXT STANDARD SIZE.
2. BOTH ENDS OF THE CASING PIPE SHALL BE PLUGGED WITH A NON-SHRINK GROUT OR CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI OR GROUTED MASONRY, EACH PLUG SHALL BE A MINIMUM LENGTH OF 18". GROUTING PRESSURE SHALL NOT EXCEED THE PIPE MANUFACTURER'S RECOMMENDATIONS.
3. VENT PIPE SHALL BE INSTALLED ON BOTH ENDS OF CASING FOR BORINGS THAT CROSS STATE HIGHWAYS OR RAILROAD CROSSINGS. VENTS SHALL BE 2" DIAMETER FOR CASING SIZES LARGER THAN 30". VENTS SHALL HAVE A 90° BEND TO POINT TOWARDS THE GROUND AND SHALL BE PAINTED INTERNATIONAL ORANGE. BUG SCREEN SHALL BE INCLUDED ON THE OPEN END OF VENT PIPE.
4. STEEL CASING PIPE SHALL CONFORM WITH ASTM A-139, STANDARD SPECIFICATION FOR ELECTRIC-FUSION (ARC) - WELDED STEEL PIPE (NPS4 AND OVER). THE STEEL MATERIAL SHALL BE NEW, SMOOTH WALL, CARBON STEEL, GRADE B, WITH A MINIMUM TENSILE STRENGTH AND MINIMUM THIRTY-FIVE-THOUSAND (35,000 PSI) POUNDS PER SQUARE INCH YIELD STRENGTH.

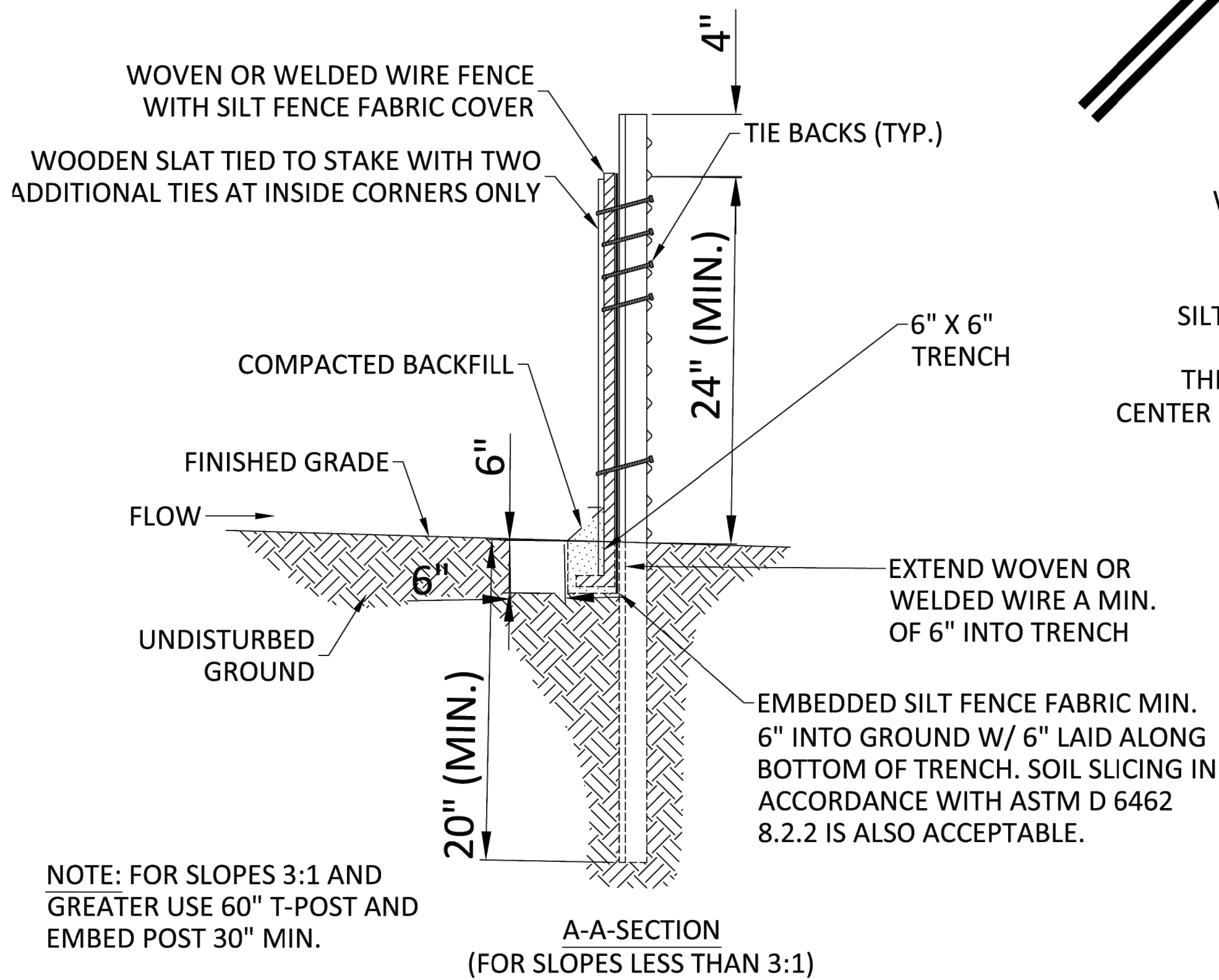




1. (1)-3-WAY FIRE HYDRANT
2. (1)-8" HDPE CONNECTING PIECE
3. (1)-8" MJ GATE VALVE
4. (1)-LOCKING TEE (8" THRU 12" LINE)
5. (1)-ADJUSTABLE VALVE BOX W/LID & COLLAR
6. (1)-WEATHERHEAD ASSEMBLY
7. SS ALL-THREAD AND RESTRAINTS ASS NEEDED

ACAD Rev: 25.0s (LMS Tech)
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Last Saved: 12/11/2024 3:08 PM Saved By: 08489

LAND SLOPE TO FLOW LENGTH	
LAND SLOPE	MAX. SHEET FLOW DISTANCE TO FENCE
5:1 OR LESS	100 FT
4:1	75 FT
3:1	50 FT
2:1	25 FT



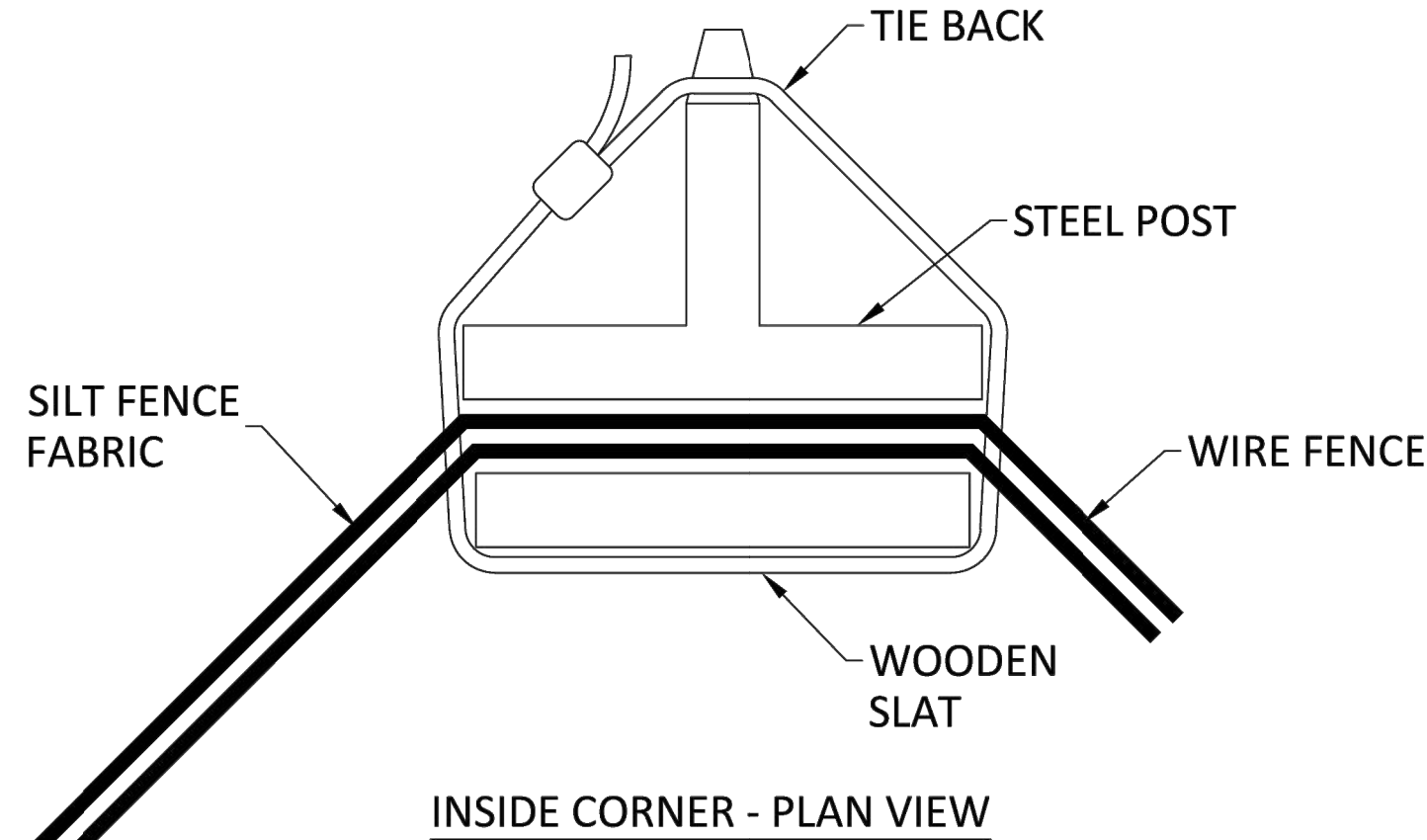
NOTE: FOR SLOPES 3:1 AND GREATER USE 60" T-POST AND EMBED POST 30" MIN.

NOTES:

- MATERIALS AND INSTALLATION SHALL COMPLY WITH ASTM D6462 LATEST EDITION AS WELL AS THE REQUIREMENTS OF THE CITY DESIGN CRITERIA MANUAL.
- INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR THE ANTICIPATED RUNOFF.
- ATTACH THE GEOTEXTILE OR FABRIC TO THE WOVEN OR WELDED WIRE FENCE WITH THREE WIRE TIES OR OTHER FASTENERS (HORIZONTALLY SPACED EVERY 30"), ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. AT EACH POST, ATTACH THE GEOTEXTILE OR FABRIC AND THE WOVEN OR WELDED WIRE FENCE TO THE POST AS PREVIOUSLY STATED. IN ADDITION, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
- WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
- ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT.
- WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
- COMPACT THE SOIL NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
- ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

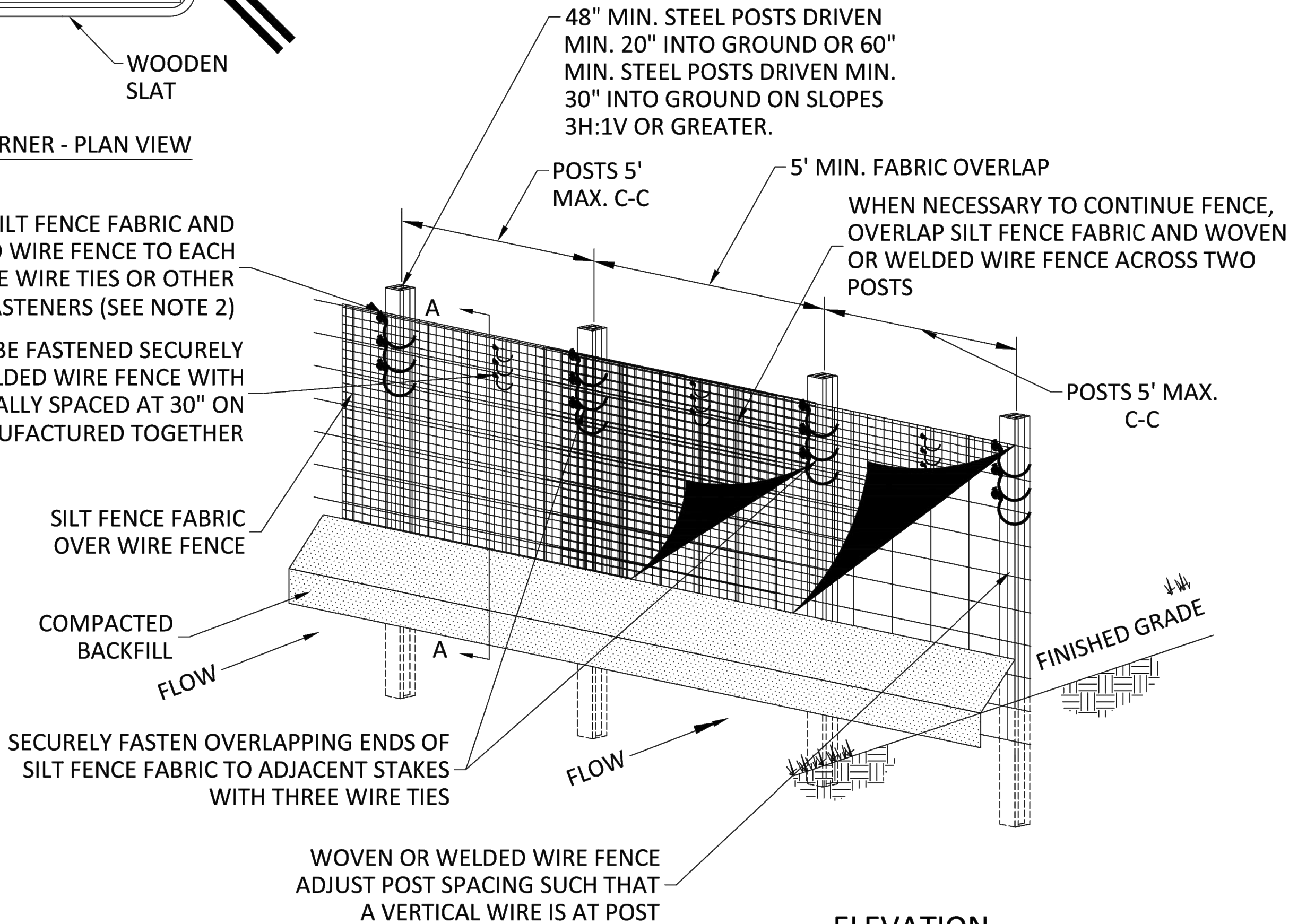
MAINTENANCE NOTES:

- SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SILT FENCE.
- SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
- IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

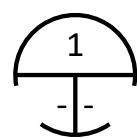


ATTACH THE SILT FENCE FABRIC AND WOVEN OR WELDED WIRE FENCE TO EACH POST WITH THREE WIRE TIES OR OTHER FASTENERS (SEE NOTE 2)

SILT FENCE FABRIC TO BE FASTENED SECURELY TO WOVEN OR WELDED WIRE FENCE WITH THREE TIES HORIZONTALLY SPACED AT 30" ON CENTER (TYP.) UNLESS MANUFACTURED TOGETHER



POSTS: STEEL T OR U TYPE.
FENCE: WOVEN OR WELDED WIRE, 14 GA., 6"X6" MAX. MESH OPENING
FABRIC: MIN. REQUIREMENTS
GRAB TENSILE= 90LBS
PERMITTIVITY = 0.05 (SEC-1)
ULTRAVIOLET STABILITY = 70%
APPARENT OPENING = 0.60 mm



SILT FENCE WITH WIRE BACKING

NOT TO SCALE

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
ONATHAN FAUGHTENBERRY P.E.
00865
DATE: 12/11/2024
THE SEALED, SIGNED AND DATED DOCUMENTS
ARE MAINTAINED IN THE OFFICE OF FREESE AND
NICHOLS AND MAY BE REVIEWED UPON REQUEST.

**FREESE
AND
NICHOLS**

3600 NW 138th St., Suite 202
Oklahoma City, OK 73134
Phone - (405) 607-7060
Web - www.freese.com
Certificate of Authorization: CA#511
Expiration Date: 06/30/2026

CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY
**N. MIDLAND ADDITION WATERLINE
REPLACEMENT**

CIVIL

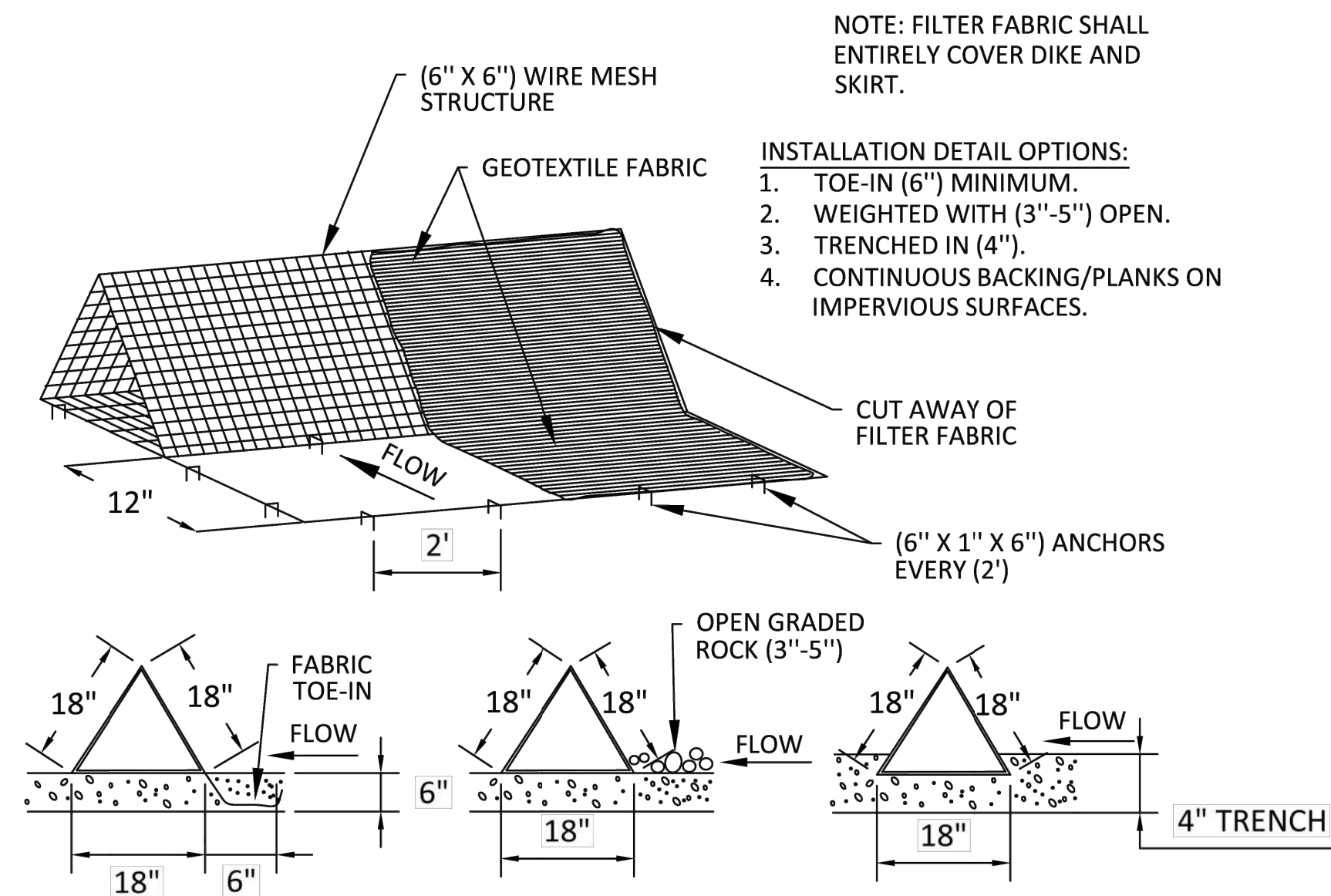
CONSTRUCTION DETAIL IV

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SEQ. 11 OF 14

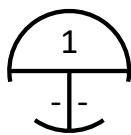
100% SUBMITTAL



TRIANGULAR SEDIMENT FILTER DIKE

NOTES:

1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS LAYER OF 3-5" OPEN GRADED ROCK OR TOED-IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHES IN 4".
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6" WIRE STAPLES ON 2' CENTERS ON BOTH EDGES AND SKIRT, OR STAKE USING 3/8" DIAMETER RE-BAR WITH TEE ENDS.
5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6" TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE 6 GA. 6"x6" WIRE MESH, 18" ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6" AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN GENERAL NOTE 8 ABOVE.



SEDIMENT FILTER DIKE AND SILT FENCE

NOT TO SCALE

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
AUTHORIZED BY: JONATHAN FAUGHTENBERRY P.E.
OKLAHOMA NO: 28605
DATE: 12/11/2024

THE SEALED, SIGNED AND DATED DOCUMENTS
ARE MAINTAINED IN THE OFFICE OF FREEZE AND
NICHOLS AND MAY BE REVIEWED UPON REQUEST.



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CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY
**N. MIDLAND ADDITION WATERLINE
REPLACEMENT**

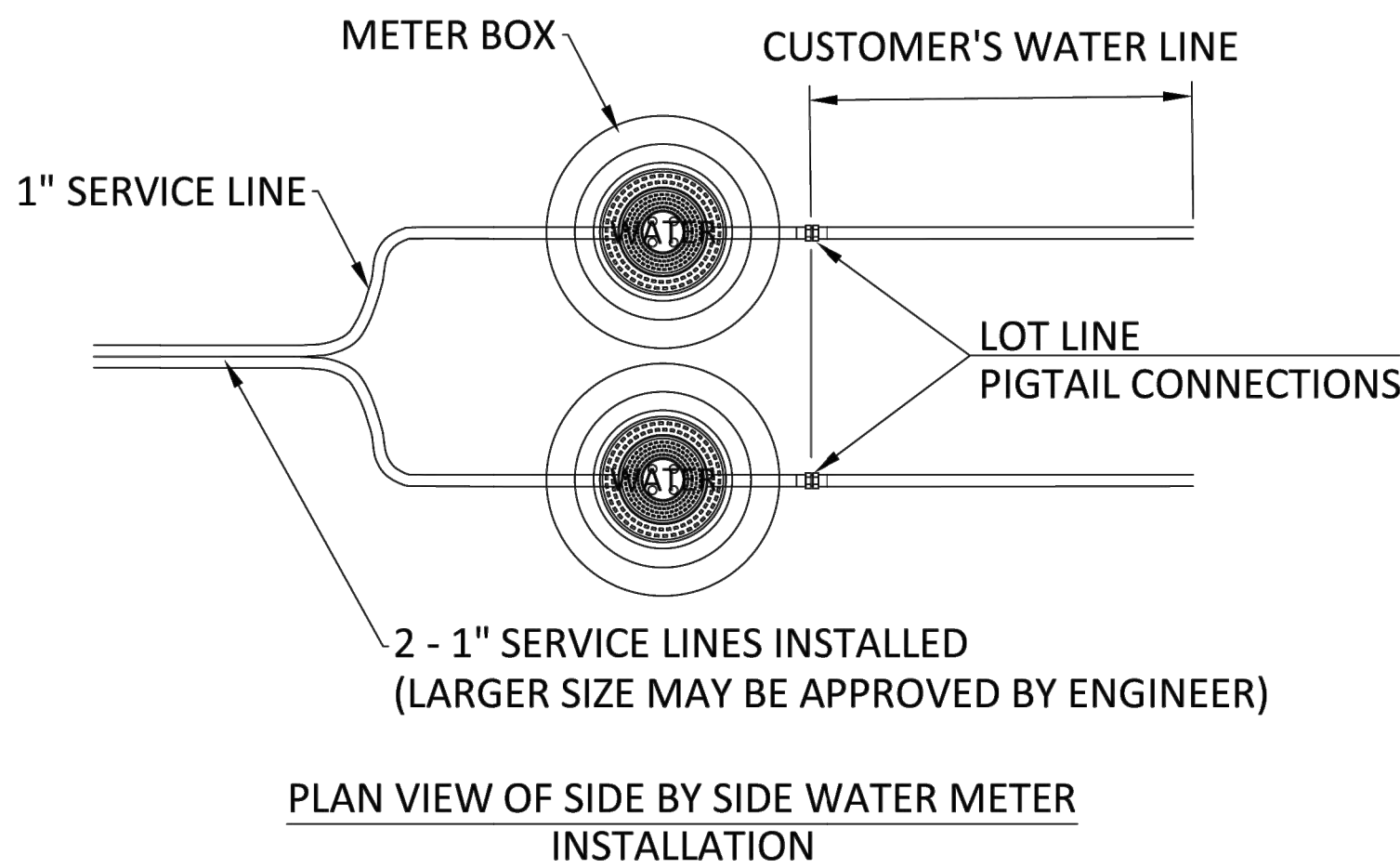
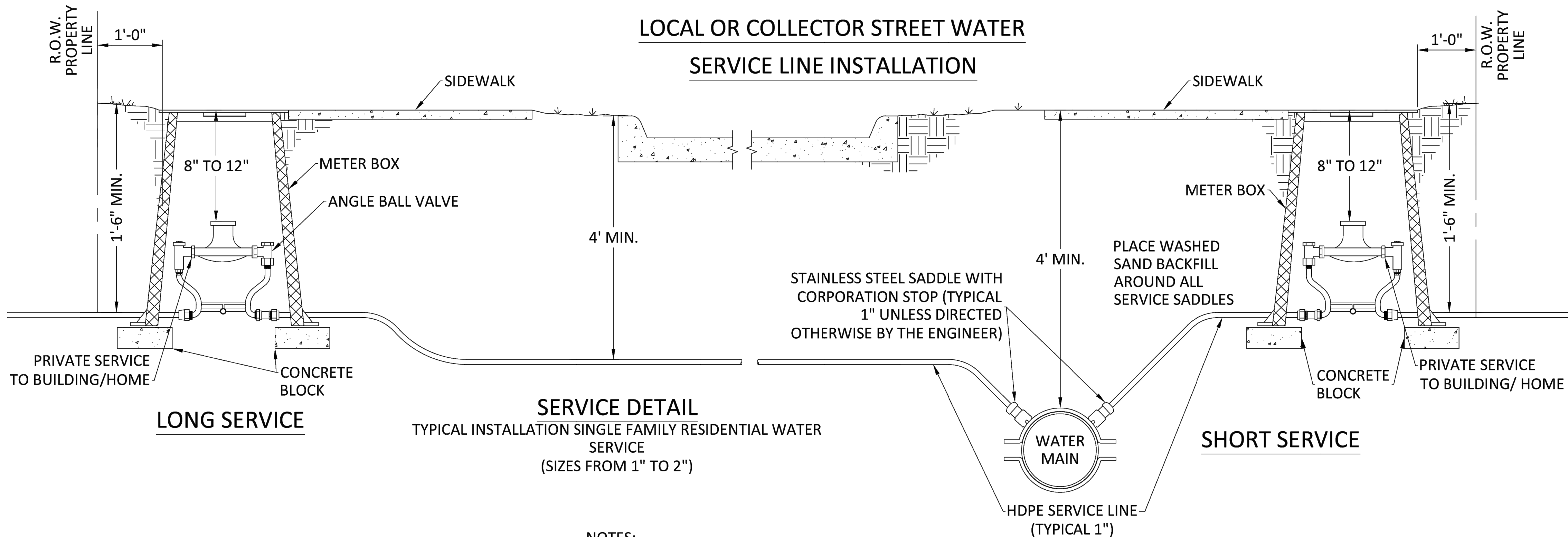
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CONSTRUCTION DETAIL V

NO.	ISSUE	BY	DATE	F&N JOB NO.	SWN24262
				DATE	10/17/2024
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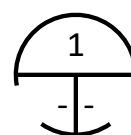
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Last Saved: 12/11/2024 3:08 PM Saved By: 08489



NOTE:
THIS STANDARD INDICATES THE DESIRED GEOMETRIC CONFIGURATION REFERENCED TO STREET PAVINGS AND PROPERTY LINES. THE 2, 1-INCH SERVICE LINES SHOWN IN THE UNDER STREET CROSSING IS RECOMMENDED BY THE CITY. PRIOR TO INSTALLATION BY CONTRACTOR, ACTUAL SIZE SHALL BE DETERMINED BY THE ENGINEER.

NOTES:

- SERVICE LINES SHALL BE HDPE (BLUE) CTS (COPPER TUBE SIZE) 200 PSI SDR9 TYPE OR APPROVED EQUAL. (MIN. 1-INCH SERVICE LINE SIZE)
- A MINIMUM DEPTH OF SERVICE LINE SHALL BE 4' BELOW THE BOTTOM OF THE ROADWAY (LONG SERVICE) AND 1'-6" BELOW GRADE FOR (SHORT SERVICES).
- ALL SERVICE TAPS SHALL BE MADE WITH A TAPPING SADDLE FOR EITHER DUCTILE IRON PIPE OR PVC PIPE WITH AT LEAST A WALL THICKNESS OF DR18. CORPORATION THREADS SHALL UTILIZE TEFLON TAPE. SADDLES SHALL BE C-900 STAINLESS STEEL DOUBLE BOLT OR FULL WRAP AROUND TYPE WITH A 1-INCH CORPORATION PACK JOINT COMPRESSION WITH CC THREADS. ALL SERVICE TAPS SHALL BE COMPLETELY COVERED AND BACKFILLED WITH WASHED SAND.
- TAPS FOR SERVICES SHALL BE MADE HORIZONTALLY OR AT AN ANGLE UP TO 45 DEGREES, (NEVER VERTICAL UNLESS APPROVED). MULTIPLE TAPS (TWO OR MORE) ARE TO BE STAGGERED AROUND THE PIPE CIRCUMFERENCE AND BE AT LEAST 24-INCHES APART.
- SERVICE SADDLES SHALL BE REQUIRED & SHALL BE STAINLESS STEEL (FULL WRAP AROUND TYPE PREFERRED.) WITH CC THREAD TAPS 304 (18-8) STAINLESS STEEL PER ASTM A240. FOR 3/4-INCH AND UP TO 2-INCHES. DOUBLE BAND OR TWO PIECE STAINLESS STEEL TYPE SADDLES MAY ALSO BE APPROVED BY THE ENGINEER. NO CAST D.I. ALLOWED.
- ALL SERVICE LINES SHALL BE CONTINUOUS FROM THE WATER MAIN TO THE METER BOX WITH NO SPLICES OR COMPRESSED AREAS. ALL SERVICE LINES SHALL HAVE (1) #12 AWG SOLID COPPER WIRE WITH 30MIL COATING INSTALLED ALONG THE SERVICE LINE FROM THE WATER MAIN TO THE METER BOX. TRACER WIRE SHALL EXTEND 12-INCHES BEYOND ANGLE STOP. SERVICE LINE TRACER WIRES SHALL BE CONNECTED TO THE WATER MAIN TRACER WIRE WITH AN APPROVED UNDERGROUND CONNECTOR. ALL TRACER WIRES SHALL BE TESTED FOR CONTINUITY PRIOR TO THE WATER LINE BEING ACCEPTED. ALL SERVICES SHALL HAVE STAINLESS STEEL INSERTS AT EACH END.
- METER BOXES SHALL BE INSTALLED WITH CONCRETE BLOCKING UNDER EACH BOX TO SUPPORT IT FROM SETTLING. BOXES SHALL BE INSTALLED SO TOP IS PARALLEL TO THE EXISTING GROUND. BOXES SHALL BE CENTERED OVER THE EXISTING WATER METER SO AS TO ALLOW EASY ACCESS TO THE ANGLE METER STOP FROM ABOVE. NO METER BOXES SHALL BE INSTALLED IN ANY SIDEWALK OR DRIVEWAY APPROACH.
- ANGLE STOP BALL VALVE SHALL BE USED AT THE END OF SERVICE LINE, WITH PACK JOINT CONNECTION. ANGLE STOP BALL VALVE SHALL MEET THE APPLICABLE REQUIREMENT OF AWWA C800, ASTM B-62 FOR 85-5-5-5 COMPOSITION BRONZE, AND USAS B2.1.



WATER METER SERVICE CONNECTION INSTALLATION

NOT TO SCALE

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
AUTHOR: JONATHAN FAUGHTENBERRY P.E.
DATE: 12/11/2024
THE SEALED, SIGNED AND DATED DOCUMENTS
ARE MAINTAINED IN THE OFFICE OF FREESE AND
NICHOLS AND MAY BE REVIEWED UPON REQUEST.

**FREESE
NICHOLS**

3600 NW 138th St., Suite 202
Oklahoma City, OK 73134
Phone - (405) 607-7060
Web - www.freese.com
Certificate of Authorization: CA#511
Expiration Date: 06/30/2026

CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY
**N. MIDLAND ADDITION WATERLINE
REPLACEMENT**

CIVIL

CONSTRUCTION DETAIL V

NO.	ISSUE	BY	DATE	F&N JOB NO.	SWN24262
				DATE	10/17/2024
				DESIGNED	MIL
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				CHECKED	JCF
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SHEET **DT-6**

SEQ. 13 OF 14

100% SUBMITTAL



1. FOR THE BORING OF E. INDEPENDENCE STREET AND TO CUT, PLUG, AND ABANDON EXISTING WATER LINE CLOSE THE WESTBOUND LANE OF E. INDEPENDENCE STREET AND THE NORTH LEG OF THE INTERSECTION AT E. INDEPENDENCE STREET AND N. MINNESOTA AVENUE.
2. FOR CONSTRUCTION ALONG N. MINNESOTA AVENUE, PLACE SIGNS TO REROUTE TRAFFIC TO N. OKLAHOMA AVENUE DURING CONSTRUCTION WHILE N. MINNESOTA AVENUE IS CLOSED.
3. IT IS ANTICIPATED THAT THE SERVICE CONNECTIONS CAN BE BORED. SHOULD TRAFFIC CONTROL BE NEEDED FOR THIS CONSTRUCTION, COORDINATE WITH THE ENGINEER.
4. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT) STANDARDS (CURRENT EDITION) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). WHEN IN CONFLICT, COORDINATE WITH THE ENGINEER.

NO.	ISSUE	BY	DATE	F&N JOB NO.
				SWN24262
				DATE 10/17/2024
				DESIGNED MJL
				DRAWN CPK
				CHECKED JCF
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CITY OF SHAWNEE/SHAWNEE MUNICIPAL AUTHORITY
N. MIDLAND ADDITION WATERLINE
REPLACEMENT
CIVIL
TRAFFIC CONTROL
DETOUR PLAN

THIS DOCUMENT WAS ORIGINALLY
SIGNED, SEALED AND DATED BY:
AUTHORIZED BY: JONATHAN FAUGHTENBERRY P.E.
OKLAHOMA NO.: 28605
DATE: 12/11/2024
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NICHOLS AND MAY BE REVIEWED UPON REQUEST.

**FREESE
& NICHOLS**
3600 NW 138th St., Suite 202
Oklahoma City, OK 73134
Phone - (405) 607-7060
Web - www.freese.com
Certificate of Authorization: CA#511
Expiration Date: 06/30/2026

CONTRACTOR_____

PROPOSALS MUST BE RECEIVED BY TUESDAY,
JANUARY 14, 2025 AT 2:00 P.M.

CONTRACT BID DOCUMENTS

CITY OF SHAWNEE
WATER LINE PROJECT
N. MIDLAND ADDITION
WATERLINE REPLACEMENT

BID OPENING:
TUESDAY, JANUARY 14, 2025 AT 2:00 P.M.

DOCUMENT ISSUED FOR BIDDING

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF BIDDING UNDER THE
AUTHORITY OF JONATHAN FAUGHTENBERRY, P.E., OKLAHOMA NO. 28605
ON DECEMBER 11, 2024. IT IS NOT TO BE USED FOR CONSTRUCTION.

FREESE AND NICHOLS, INC.

OKLAHOMA REGISTERED ENGINEERING FIRM CA 511

16 West 9th Street
Shawnee, OK 74801-6812
Telephone: (405) 878-1760

PREPARED BY:

Freese and Nichols, Inc.
5100 E Skelly Dr
Suite 602
Tulsa, OK 74135

00 01 07 DESIGN PROFESSIONAL SEALS

	Specification Sections Sealed
	Division 00 Division 01 Division 03 Division 22 Division 31 Division 32 Division 33 Division 40
OKLAHOMA REGISTERED ENGINEERING FIRM CA-511	

END OF SECTION

Division 00

Procurement and Contracting Requirements

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Section	Title
Division 00	Procurement and Contracting Requirements
00 01 01	Project Cover Sheet
00 01 10	Table of Contents
00 11 16	Invitation to Bid
00 41 13	Bid Form
00 41 16	Bid Form Exhibit A
00 43 13	Bid Bond
00 45 01	Nonresident Bidders
00 45 02	Non-Collusion Certification
00 45 03	Business Relationship Statement
00 45 13	Qualifications Statement
00 61 13	Performance Bond
00 61 16	Payment Bond
00 61 19	Maintenance Bond
00 61 20	Maintenance Bond Requirements
00 72 00	General Conditions
00 73 00	Supplementary Conditions
00 73 16	Insurance Requirements
	Advertisement for Bids
	Information for Bidders
	Disadvantaged Business Enterprise Program (DBE) Guidance (ARP-267)
	Disadvantaged Business Enterprise Program (DBE) Guidance
	Appendix A: Project Owner, Prime Contractor and Sub-Contractor Responsibilities
	Appendix B: Title 40 Part 33 Subpart C-Good Faith Efforts
	Appendix C: Resource Listing and Contact Information for Utilization of Minority and Women's Business Enterprises
	ARP-6100-2 DBE Subcontractor Participation Form
	ARP-6100-3 DBE Subcontractor Participation Form
	ARP-6100-4 DBE Subcontractor Utilization Form
	Bidder's Statement about: Equal Opportunity Clause (ARP-211)
	Bidder's Statement about: Non-Segregated Facilities (ARP-212 and ARP-212a)
	Bidder's Statement about: Bonds
	Bidder's Statement about: sam.gov registration
	Bidder's Statement about: Davis Bacon Act
	Affidavits
	Claim or Invoice Affidavit
	Notice of Award
	Agreement
	Notice to Proceed

Section	Title
	Certificate of Approval of Contracts and Bonds By Local Attorney
	Project Sign
Division 01	General Requirements
01 11 00	Summary of Work
01 23 10	Alternates and Allowances
01 26 00	Change Management
01 29 00	Application for Payment Procedures
01 29 01	Measurement and Basis for Payment
01 31 00	Project Management and Coordination
01 31 13	Project Administration
01 33 00	Document Management
01 33 02	Shop Drawings
01 33 03	Product Data
01 33 04	Operation and Maintenance Data
01 33 05	Construction Progress Schedule
01 33 06	Graphic Documentation
01 35 00	Special Procedures
01 40 00	Quality Management
01 57 00	Temporary Controls
01 57 23	Temporary Stormwater Pollution Control
01 60 00	Product Requirements
01 70 00	Execution and Closeout Requirements
Division 03	Concrete
03 30 00.01	Cast-In-Place Concrete (Limited Applications)
Division 22	Plumbing
22 10 00.01	Miscellaneous Piping and Appurtenances
Division 31	Earthwork
31 05 13	Soils for Earthwork
31 05 16	Aggregates for Earthwork
31 11 00	Clearing and Grubbing
31 23 23.34	Flowable Fill
31 23 33	Trenching and Backfilling
31 23 36	Trench Safety
Division 32	Exterior Improvements
32 01 29	Rigid Paving Repair
32 91 19.13	Topsoil Placement and Grading
32 92 00	Sodding

Section	Title
Division 33	Utilities
33 05 01.02	Ductile Iron Pipe and Fittings
33 05 05.31	Hydrostatic Testing
33 05 23.33	Pipeline Crossing by Tunnel or Trenchless Construction Methods
33 10 13	Disinfecting of Water Utility Distribution
33 12 19	Water Utility Distribution Fire Hydrants
33 31 13.16	HDPE Piping
Division 40	Process Integration
40 05 61	Gate Valves

END OF SECTION

00 11 16 INVITATION TO BID

ARTICLE 1 – GENERAL NOTICE

- 1.01 The City of Shawnee (Owner) is requesting Bids for the construction of the following Project:
 T.O. 4 N. Midland Addition Waterline Replacement
 ARP-23-0015-DPG
- 1.02 Description of the Work
1. Replacement of approximately 1,100 feet of 2-inch and 4-inch water line to 8" HDPE and related appurtenances in the same corridors that runs along Scott Street and N. Minnesota Ave. and related appurtenances in the same corridors.
- 1.03 The Project is to be substantially complete and ready for operation no later than 120 days after Notice to Proceed. The Project is to be complete and eligible for final payment 30 days after the date for Substantial Completion.

ARTICLE 2 – EXAMINATION AND PURCHASE OF DOCUMENTS

- 2.01 Advertisement and bidding information for the Project can be found at the following procurement website:

 [**https://www.civcastusa.com/**](https://www.civcastusa.com/)
- 2.02 Prospective Offerors must register with the procurement website as a plan holder, even if the Contract Documents are obtained from a plan room or other site. All official notifications, Addenda, and other documents will be offered only through the procurement website.
- 2.03 The Contract Documents may be downloaded from the procurement website by prospective Offerors registered as plan holders. Offerors are responsible for ensuring that a complete set of documents, as defined in Section 00 52 13 "Agreement," are used in the preparation of their Bids. The documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download does not confer a license or grant permission or authorization for any other use. Authorization to download documents includes the right for Offerors to print documents for their sole use, provided they pay all costs associated with printing or reproduction. Printed documents may not be resold under any circumstances.
- 2.04 The procurement website will be updated periodically with Addenda, lists of interested parties, reports, or other information relevant to submitting a Bid for the Project.
- 2.05 Printed copies of the Contract Documents, Technical Data, and other information may be examined free of charge at the following address:

 City Clerk's Office
 222 N Broadway
 Shawnee, OK 74801
 Hours Available for Viewing: 8 AM to 4 PM Monday-Friday (Closed 12-1 for lunch)

ARTICLE 3 – PRE-BID CONFERENCE

- 3.01 A mandatory pre-bid conference for the Project will be held on 1/7/25 at 2 pm. at the following location:

City of Shawnee
16 W 9th St
Shawnee, OK 74801

ARTICLE 4 – QUESTIONS REGARDING BIDDING PROCESS OR SOLICITATION DOCUMENTS

- 4.01 Questions are to be submitted using the question and answer process on the procurement website. Responses to questions posted on the procurement website will be posted for the benefit of all Offerors. A response will be posted for questions submitted until 5 pm on 1/10/25.
- 4.02 A response to a question posted on the procurement website that requires modification of the Contract Documents will be made by Addenda. Modifications to the Contract Documents prior to the award of the Contract can only be made by Addenda. Only answers in Addenda posted on the procurement website will be binding. Oral and other interpretations or clarifications will be without legal effect.

ARTICLE 5 – BID SECURITY

- 5.01 Offerors must submit an acceptable Bid Security with their Bids as a guarantee that the Successful Offeror will enter into a contract for the Project with the Owner within 15 days of Notice of Award of the Contract. The Bid Security must be payable to the City of Shawnee in the amount of 5 percent of the proposed Contract Price. The Successful Offeror must execute the Contract and bonds on the forms provided in the Contract Documents and provide evidence of insurance as required by the Contract Documents.
- 5.02 Bid Security must be in the form of a bid bond. The bid bond may be submitted on the form provided in Section 00 43 13 “Bid Bond” or Offerors may provide their surety’s standard penal sum bid bond form. The bid bond must reference the Owner and the Project by name as identified in this Section.
- 5.03 Bid Security may be in the form of a bid bond, irrevocable letter of credit, cashier’s check, or certified check. Checks must be made out to the City of Shawnee. The bid bond may be submitted on the form provided in Section 00 43 13 “Bid Bond” or Offerors may provide their surety’s standard penal sum bid bond form. The bid bond must reference the Owner and Project by name as identified in this Section.

ARTICLE 6 – DELIVERY OF BIDS

- 6.01 Sealed Bids must be delivered to the Owner at the address below no later than 1/14/25 at 2 pm. to be accepted. The Bids will be publicly opened and read aloud at this time and place including the names of the Offerors and their Bids. Address Bids to the Owner as follows:

City of Shawnee
Engineering Department
Attn: Bid – T.O. 4 N. Midland Addition Waterline Replacement
16 W 9th St

Shawnee, OK 74801

- 6.02 Any Bid received by the Owner, more than 96 hours excluding Saturdays, Sundays and holidays before the time set for the opening of Bids, or any Bid so received after the time set for opening of Bids, will not be considered by the Owner and will be returned unopened to the Offeror.

ARTICLE 7 – AWARD OF CONTRACT

- 7.01 It is the intent of the Owner to award this Contract to the lowest responsible Offeror. The Owner reserves the right to adopt the most advantageous interpretation of the Bids submitted in the case of ambiguity or lack of clearness in stating bid prices, to reject any or all Bids, and/or waive formalities. Bids will remain subject to acceptance and may not be withdrawn within 30 days from the date on which Bids are opened.

ARTICLE 8 – OTHER CONTRACT REQUIREMENTS

- 8.01 A statutory defect bond, performance bond, and payment bond will be required for this Project.
- 8.02 Selected Contractor will be required to purchase goods and equipment manufactured or produced in the United States of America to the extent required by Okla. Stat. §61-51.

END OF SECTION

00 41 13 BID FORM

ARTICLE 1 – BID RECIPIENT

- 1.01 The Offeror submits this Bid to:
- City of Shawnee
City Clerk's Office
222 N Broadway
Shawnee, OK 74801
Attention: Seth Barkhimer
N. Midland Addition Waterline Replacement

ARTICLE 2 – OFFEROR'S ACKNOWLEDGMENTS

- 2.01 Offeror proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner on the form included in the Contract Documents, to perform all Work specified or indicated in Contract Documents for the Contract Price indicated in this Bid or as modified by Contract Amendment. Offeror agrees to complete the Work within the Contract Times established in the Agreement or as modified by Contract Amendment and comply with all terms and conditions of the Contract Documents.
- 2.02 Offeror accepts all terms and conditions of Section 00 11 16 "Invitation to Bid" and Section 00 21 13 "Instructions to Offerors."
- 2.03 Offeror accepts the provisions of the Agreement as to liquidated damages in the event of its failure to complete Work in accordance with the schedule set forth in the Agreement.
- 2.04 Offeror acknowledges receipt of the following Addenda:

Addendum No.	Addendum Date	Signature Acknowledging Receipt

ARTICLE 3 – OFFEROR'S REPRESENTATIONS

- 3.01 The Offeror has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- 3.02 The Offeror has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- 3.03 The Offeror is familiar with Laws and Regulations that may affect cost, progress, and performance of the Work.
- 3.04 The Offeror has carefully studied the following Site-related reports and drawings as identified in the Supplementary Conditions:
- A. Geotechnical Data Reports regarding subsurface conditions at or adjacent to the Site;

- B. Drawings of physical conditions relating to existing surface or subsurface structures at the Site;
 - C. Underground Facilities referenced in reports and drawings;
 - D. Reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site; and
 - E. Technical Data related to each of these reports and drawings.
- 3.05 The Offeror has considered the:
- A. Information known to Offeror;
 - B. Information commonly known to contractors doing business in the locality of the Site;
 - C. Information and observations obtained from visits to the Site; and
 - D. The Contract Documents.
- 3.06 The Offeror has considered the items identified in this Article with respect to the effect of such information, observations, and documents on:
- A. The cost, progress, and performance of the Work;
 - B. The means, methods, techniques, sequences, and procedures of construction to be employed by Offeror; and
 - C. Offeror's safety precautions and programs.
- 3.07 The Offeror agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents based on the information and observations referred to in the preceding paragraphs.
- 3.08 The Offeror is aware of the general nature of Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- 3.09 The Offeror has correlated the information known to the Offeror, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- 3.10 The Offeror has given the Construction Manager written notice of all conflicts, errors, ambiguities, or discrepancies that the Offeror has discovered in the Contract Documents, and the written resolution provided by the Construction Manager is acceptable to the Offeror.
- 3.11 The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 3.12 Offeror's submittal of a Bid constitutes an incontrovertible representation that, without exception, all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 4 – BASIS OF OFFER

- 4.01 Offeror will complete the Work in accordance with the Contract Documents at the unit prices shown in the attached in Section 00 41 16 “Bid Form Exhibit A”:
- A. Extended amounts have been computed in accordance with Article 13 of the General Conditions.
 - B. Offeror acknowledges that the estimated quantities are not guaranteed, and final payment for all Unit Price items will be based on actual quantities provided, measured as provided in the Contract Documents.
 - C. Unit Prices will be used to compute the actual bid price.

ARTICLE 5 – TIME OF COMPLETION

- 5.01 Offeror will complete the Work required to be substantially completed within 120 calendar days after the date when the Contract Times commence to run as provided in the General Conditions. Offeror will complete the Work required for final payment in accordance with Article 15 of the General Conditions within 120 days after the date when the Contract Times commence to run.

ARTICLE 6 – ATTACHMENTS TO THIS BID

- 6.01 The following documents are attached to and made a condition of this Bid:
- A. Section 00 41 16 “Bid Form Exhibit A.”
 - B. Section 00 43 13 “Bid Bond.”
 - C. Section 00 45 01 “Nonresident Bidders.”
 - D. Section 00 45 02 “Non-Collusion Certification.”
 - E. Section 00 45 03 “Business Relationship Statement.”
 - F. Bid Proposal
 - G. Contractor’s Statement about Equal Opportunity (ARP-211)
 - H. Contractor’s Certificate of Non-Segregated Facilities (ARP-212)
 - I. Sub-Contractor’s Certificate of Non-Segregated Facilities (ARP-212a)
 - J. Bidder’s/Supplier’s List (ARP-249)
 - K. Subcontractor Performance form (ARP-6100-3)
 - L. Subcontractor Utilization form (ARP-6100-4)

ARTICLE 7 – VENUE

- 7.01 Offeror agrees that venue will lie exclusively in Pottawatomie County, Oklahoma for any legal action.

ARTICLE 8 – BID DELIVERY

8.01 This Bid is submitted by:

Offeror: _____
(typed or printed name of organization)

Signature: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:

Phone: _____ Email: _____

(Attach evidence of authority to sign if Offeror is a corporation, partnership, or a joint venture.)

END OF SECTION

00 41 16 Bid Form Exhibit A

Project:	N. Midland Addition Waterline Replacement		Project No.:
Owner:	City of Shawnee		
Design Professional:	Jonathan Faughtenberry		SWN24262
Offeror:			

Base Bid

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Extended Amount
Items in Base Bid (excluding Allowances) per Section 01 29 01 "Measurement and Basis for Payment"					
A-01	8" HDPE (DIPS) WATER LINE, DR 11 BY OPEN CUT	LF	650		
A-02	14" STEEL CASING BY TRENCHLESS	LF	400		
A-03	8" GATE VALVE, AWWA	EA	3		
A-04	8"x8" TAPPING SLEEVE AND VALVE	EA	2		
A-05	8"x6" TEE	EA	2		
A-06	8" 90° BEND	EA	1		
A-07	8" 45° BEND	EA	2		
A-08	FIRE HYDRANT ASSEMBLY, INC. ISOLATION VALVE	EA	2		
A-09	NEW LONG SIDE WATER SERVICE BY TRENCHLESS	EA	5		
A-10	NEW SPECIALTY WATER SERVICE	EA	10		
A-11	LEAD SERVICE LINE REMOVAL AND DISPOSAL	EA	1		
A-12	BLOCK SODDING	SY	1,283		
A-13	CLEARING AND GRUBBING	LS	1		
A-14	HYDROSTATIC TESTING AND DISINFECTION	LS	1		
A-15	PREPARE AND IMPLEMENT SWPPP	LS	1		
A-16	TRAFFIC CONTROL	LS	1		
A-17	PROJECT SIGN	EA	1		
A-18	CUT AND PLUG EXISTING WATER LINE	EA	3		
A-19	CELLULAR CONCRETE FILL ABANDONED LINES	CY	4		
A-20	CONCRETE PAVEMENT REPAIR	SY	94		
A-21	CONCRETE DRIVEWAY REPAIR	SY	187		
A-22	ASPHALT PAVEMENT REPAIR	SY	77		
A-23	GRAVEL DRIVEWAY REPAIR	SY	33		
A-24	8" CORRUGATED METAL CULVERT REPLACEMENT	LF	70		
A-25	MOBILIZATION	LS	1		
A	Total Base Bid Items Amount (Sum of Extended Amounts for each Base Bid Line Item)				\$ -

Allowances in Base Bid per Section 01 23 10 "Alternates and Allowances"

B-1	LANDSCAPING RESTORATION	LS	1	\$ 5,000.00	\$ 5,000.00
C	Total Allowance Amount (Sum of Extended Amounts for Each Allowance Line Item)				\$ 5,000.00
D	Total Base Bid with Allowances (Sum of A and C)				

BID SUBMITTED BY:

Offeror: _____
Signature: _____
Printed Name: _____
Title: _____
Date: _____

00 43 13 BID BOND

Offeror as Principal Name: Mailing address (principal place of business):	Surety Name: Mailing address (principal place of business):
Owner Name: Mailing address (principal place of business):	Physical address (principal place of business): Telephone (Main): Telephone (Claims):
Contract Project name and number: Bid/Proposal Due Date:	Surety's state of incorporation: <i>By submitting this bond, Surety affirms it is authorized to do business and licensed to execute bonds in the state where the Project is located.</i> Local Agent for Surety Name:
Bond Contract Price Offered: Penal Sum of Bond: 5% of Contract Price offered Date of Bond:	Company: Mailing address (principal place of business): Telephone (Main):

Surety and Offeror, intending to be legally bound by this bond, do each cause this bond to be duly executed on its behalf by its authorized officer, agent, or representative. Surety and Offeror bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally to this bond. The condition of this obligation is such that if Owner accepts the Offeror's Bid or Proposal and Offeror delivers the executed Agreement and the required bonds and evidence of insurance within the time stipulated in the Bidding or Proposal Documents this obligation is null and void. Payment under this bond will be due and payable upon default by Offeror and within 30 days after receipt by Offeror and Surety of written notice of default from Owner. This Agreement shall be administered and interpreted under the laws of the state where the Project is located. Venue lies exclusively in Pottawatomie County, Oklahoma for any legal action.

Offeror as Principal Signature: _____ Name: _____ Title: _____ Email: _____	Surety Signature: _____ Name: _____ Title: _____ Email: _____ <i>(Attach Power of Attorney)</i>
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END OF SECTION

00 45 01 NONRESIDENT BIDDERS

Okla. Stat. §61-14 applies to the award of government contracts to nonresident bidders. This section provides that:

“To the extent permitted by federal laws and regulations, whenever the State of Oklahoma, or any department, agency or institution thereof or any city, town or county shall let for bid any contract to a contractor for any public works, the contractor domiciled outside the boundaries of Oklahoma shall be required, in order to be successful, to submit a bid the same percent less than the lowest bid submitted by a responsible contractor domiciled in Oklahoma as would be required for such an Oklahoma domiciled contractor to succeed over the bidding contractor domiciled outside Oklahoma on a like contract being let in his domiciliary state.”

Check the statement that is correct for Offeror:

- ☐ Offeror (includes parent company or majority owner) qualifies as a resident bidder whose principal place of business is in Oklahoma.
- ☐ Offeror qualifies as a nonresident bidder whose principal place of business or residency is in the state of: _____

Bidder preferences, if any, will be determined in accordance with applicable Laws and Regulations.

Offeror: _____
(typed or printed name of organization)

Signature: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Business Address:

Phone: _____ Email: _____

(Attach evidence of authority to sign if Offeror is a corporation, partnership, or a joint venture.)

END OF SECTION

I certify, if awarded the contract, whether competitively bid or not, neither the contractor nor anyone subject to the contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring the contract to which this statement is attached.

Offeror: _____
(typed or printed name of organization)

Signature: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Business Address: _____

Phone: _____ Email: _____

(Attach evidence of authority to sign if Offeror is a corporation, partnership, or a joint venture.)

Subscribed and sworn to before me on this _____ day of _____ 20 ____ .

Notary Public: _____ My commission expires: _____

Notary Seal:

END OF SECTION

00 45 03 BUSINESS RELATIONSHIP STATEMENT

STATE OF Oklahoma §

COUNTY OF Pottawatomie §

Owner: City of Shawnee
16 W 9th St
Shawnee, OK 74801

Contract: N. Midland Addition Waterline Replacement

_____, being first duly sworn, on oath declares that he/she is authorized to represent the Offeror in all matters related to this Bid. Affiant further states that the nature of any partnership, joint venture, or other business relationship presently in effect or which existed within 1 year prior to the date of this statement with the architect, engineer, or other party to the Project is as follows:

Affiant further states that any such business relationship presently in effect or which existed within 1 year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the Project is as follows:

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

If none of the business relationships hereinabove mentioned exists, affiant should so state in the spaces provided above.

Offeror: _____
(typed or printed name of organization)

Signature: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Business Address:

Phone: _____ Email: _____
(Attach evidence of authority to sign if Offeror is a corporation, partnership, or a joint venture.)

Subscribed and sworn to before me on this _____ day of _____ 20 ____ .

Notary Public: _____ My commission expires: _____

Notary Seal:

END OF SECTION

00 45 13 QUALIFICATIONS STATEMENT

ARTICLE 1 – REQUIREMENTS FOR THE QUALIFICATIONS STATEMENT

- 1.01 The Qualifications Statement must be submitted by the apparent low Offeror within 5 calendar days of the bid opening and include the information as described in this Section as a minimum. Failure to submit the required information in the Qualifications Statement may result in Owner considering the Bid non-responsive and may result in rejection of the Bid by Owner. Offerors may be required to provide supplemental information if requested by Owner to clarify, enhance, or supplement the information provided in the Qualifications Statement.
- 1.02 Offeror must provide the information requested in this Qualifications Statement using the forms attached to this Section. The information requested in these forms must be provided completely and in detail. Information that cannot be totally incorporated in the forms may be included as an appendix to the form. This appendix must be clearly referenced by appendix number on the form, and the appended material must include the appendix number on every sheet of the appendix. The appendix must include only the information that responds to the question or item number to which the appended information applies.
- 1.03 Offeror may provide supplemental information to the Qualifications Statement such as organizational brochures or other marketing information to help demonstrate their qualifications to Owner. This information may not be submitted as a substitute for the information specifically requested in this Section. The reference must include the specific paragraph or section that applies to that question or item if this information is included as an appendix to the information requested in Article 2.

ARTICLE 2 – INSTRUCTIONS FOR PREPARING THE QUALIFICATIONS STATEMENT

- 2.01 Offeror's Organization and General Information:
 - A. Provide general information about the Offeror's organization using copies of Table 1. Provide the same information for each joint venture partner if the Offeror is a joint venture.
 - B. Provide information regarding the operational structure of the Offeror's organization, including a list of officers, the limits of authority for these individuals with regards to the proposed Project, documentation of authority to execute documents, and a copy of organizations' certificate of authorization to conduct business in the state the Project is located in. If the Project is located in a state that licenses contractors, Offeror must also provide documentation showing that the organization is licensed as a general contractor in that state, including any applicable classifications and limitations.
 - C. Financial Management:
 1. Provide the Offeror's most recent audited financial statement and the most recent financial statement if the most recent audited financial statement is more than 2 years old.

2. Provide the Offeror's financial summary information in Table 1, including the financial indicators from the Offeror's most recent financial statement using the formulas below:

Current Ratio: $\text{Current Assets} \div \text{Current Liabilities}$

Quick Ratio: $(\text{Cash and Cash Equivalents} + \text{Accounts Receivable} + \text{Short Term Investments}) \div \text{Current Liabilities}$

3. Describe the resources that are available to Offeror to provide adequate cash flow for the Project if the Offeror's Current Ratio or Quick Ratio are less than 1.0.

D. Safety:

1. Provide a narrative not to exceed four pages describing the Offeror's success in implementing an effective project site safety program. Provide a narrative describing the Offeror's safety program and a statement regarding the organization's commitment to safety. Do not provide copies of safety manuals or programs.
2. Provide Experience Modification Ratio (EMR) and Total Recordable Frequency Rate (TRFR) history for the last 3 years for Offeror and any proposed subcontractors that will provide Work valued at 25 percent or more of the Contract Price. Provide this information in Table 1.
 - a. Offeror's EMR is a computation by the insurance industry that compares a company's annual losses in workers' compensation insurance claims against its policy premiums over a three-year period, excluding the current year.
 - b. Offeror's TRFR is a calculation of a firm's total number of OSHA-recordable injuries and illnesses over a given period (usually a year), divided by the total number of personnel-hours worked.

- E. Claims Experience and Litigation History: Provide a list of all claims or litigation involving owners on other construction projects that have been active over the last 5 years or that are currently unresolved. Include this information in Table 1. Provide a narrative describing the issues being contested and when it is anticipated that the disputes will be resolved. Claims are to include only those items which have progressed through the change management process for the project and are being disputed by Offeror or the project owner.

- F. Past Experience with the Owner: Provide a list of projects that have been completed with Owner over the last 5 years. Include this information in Table 1. Provide a narrative not to exceed two pages describing how this experience will impact the performance of Offeror on this Project.

2.02 Project Experience:

- A. Provide a list of projects completed by Offeror in the last 5 years using copies of Table 2.
- B. Provide detailed descriptions of projects which demonstrate the experience of the Offeror's team with construction of similar projects. Experience must include, as a minimum, the satisfactory completion of at least five similar projects within the last 5 years. Offerors not

meeting the requirement for similar projects may be disqualified as being non-responsive. Similar projects must include:

1. Water distribution lines, HDPE pressure pipe installation
- C. Provide a narrative not to exceed two pages for each project describing up to five specific projects that qualify as similar projects. Projects selected must demonstrate the capabilities of Offeror.

2.03 Experience and Qualifications of Proposed Key Personnel:

- A. Provide a narrative not to exceed four pages describing the Offeror's project management structure and the qualifications of the project management team for this Project. Include an organization chart showing the relationship between Offeror and key subcontractors and suppliers.
- B. Provide information on the key personnel proposed for this Project on Tables 3 through 7. Key personnel include the project manager, project superintendent, safety manager, and quality control manager. Offeror may provide information on an alternate individual if it is not able to commit to one individual for the Project at the time the Bid is submitted. Qualifications of these individuals will be considered in evaluating the Offeror's qualifications. Offeror must commit to providing the services of the proposed key personnel or alternate for the life of the Project as a condition of qualification. Failure to provide the proposed key personnel may result in the disqualification of Offeror and will provide the basis for termination of the Contract at the discretion of Owner.
- C. Include a list of the current project assignments for each of the individuals proposed, the anticipated completion date for these assignments, and the percentage of the time they will have available to devote to this Project. The project superintendent must be dedicated to the Project full time for the duration of the Project. If any other key personnel are not devoted solely to the Project, indicate how time is to be divided between the Project and other assignments. Specifically address how and when individuals currently on other assignments will transition to the Project.
- D. Provide resumes not exceeding two pages for each individual proposed for the key personnel positions and their alternates. Resumes must describe the qualifications of the individual and include the following as a minimum: technical experience, managerial experience, education and formal training, primary language, and a work history which describes project experience, including the roles and responsibilities for each assignment. Additional information highlighting the experience which makes them the best candidate for the assignment should also be included. Focus on projects on which individuals proposed have had significant involvement in the last 5 years and which demonstrate experience with similar projects.
- E. Identify individuals that will fill one or more of these key roles and describe their ability to handle multiple responsibilities. Provide a written narrative describing the percentage of the time that will be devoted to each role and the qualifications to fulfill each role if an individual is to fulfill more than one of the key personnel roles.
- F. Provide a tabulation of the projects on which the key personnel have been personally involved using copies of Table 7. This tabulation is to include the name and a current telephone number for references for each of these project assignments.

- G. Provide a narrative not to exceed two pages for each project the proposed individuals have worked on that qualify as similar projects. Specifically identify the role and responsibilities of the individual on these similar projects. Projects selected must demonstrate the capabilities of the proposed key personnel.
 - H. Provide a narrative not to exceed ten pages to describe the overall performance of the individuals on these projects. This narrative may include references to letters of recommendation, project awards, and other references to demonstrate experience in constructing a project which meets the project owner's expectations for a quality project constructed on time and within budget.
- 2.04 Offeror's Ability to Complete Projects within the Contract Price and Contract Times:
- A. Provide a tabulation of budget performance on projects completed by Offeror within the last 5 years using copies of Table 8 to demonstrate the ability of the Offeror to complete projects for the Contract Price. Notes may be added to each line item to describe circumstances for change orders beyond the control of Offeror.
 - B. Provide a tabulation of all projects completed by Offeror within the last 5 years on Table 9 to demonstrate performance in completing projects on time. Notes may be added to the tabulations to indicate the reasons for not meeting original contract completion dates.

ARTICLE 3 – BID REQUIREMENTS

- 3.01 Provide the Qualifications Statement using the referenced tables and narrative descriptions as described in this Section. Pages are to be 8-1/2 x 11, with a minimum font size of 10. Provide a tab to separate materials responding to each of the rating categories listed in Article 2.
- 3.02 Additional information may be included in appendices attached to the Bid. Each appendix must reference the section of the criteria it is in reference to.
- 3.03 Provide one printed copy of the Bid at the time and place set forth in Section 00 11 16 "Invitation to Bid." Provide a digital copy of the Bid in Portable Document Format (pdf) on a CD. This digital copy is to include all information required to evaluate the Bid.

ARTICLE 4 – FORMS

- 4.01 The following tables are attached to this Section:

Table	Description
1	General Information
2	Current Projects and Project Completed within the last 5 Years
3	Proposed Project Managers
4	Proposed Project Superintendents
5	Proposed Project Safety Managers
6	Proposed Project Quality Control Managers
7	Project Information for Key Personnel
8	Demonstration of Budget Performance
9	Demonstration of On-Time Performance

ARTICLE 5 – CERTIFICATION

- 5.01 By submitting this Qualifications Statement and related information, Offeror certifies that it has read this Qualifications Statement and that the Offeror's responses are true and correct and contain no material misrepresentations, and that the individual signing below is authorized to make this certification on behalf of the Offeror's organization.

Offeror: _____
(typed or printed name of organization)

Signature: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Attest: _____
(individual's signature)

Designated Representative:

Name: _____

Title: _____

Address for giving notices:

Phone: _____ Email: _____

(Attach evidence of authority to sign if Offeror is a corporation, partnership, or a joint venture.)

Table 1 - General Information

Organization			
Legal Name of Business			
Form of Business Entity: ☐ Joint Venture ☐ Corporation ☐ General Partnership ☐ Limited Partnership			
Date Business was formed		State under which Business was formed	
Is this Business authorized to operate in the Project location: ☐ Yes ☐ No ☐ Pending			
Is this Business licensed as a general contractor in the Project location: ☐ Yes ☐ No ☐ Pending ☐ N/A			
List of companies, firms, or organizations that own any part of this Business.			
Name of company, firm, or organization.			Percent ownership
Principal Office			
Primary contact		Main telephone number	
Email address		Website address	
Business address of principal office			
Regional Office			
Primary contact		Main telephone number	
Email address		Website address	
Business address of regional office			
Business History			
List of names that this Business currently has or anticipates operating under over the history of the Business, including the names of related companies presently doing business.			
Names of organization	From date	To date	
Indicators of Organization Size			
Average number of current full-time employees			
Average estimate of revenue for the current year			

Table 1 - General Information Cont'd

Previous Contracting Experience			
Years of experience in projects similar to the proposed Project:			
As a general contractor		As a joint venture partner	
Has this organization or a participating or predecessor organization ever been disqualified as a bidder by any local, state, or federal agency within the last 5 years? ☐ Yes* ☐ No			
Has this organization or a participating or predecessor organization ever been barred from contracting by any local, state, or federal agency within the last 5 years? ☐ Yes* ☐ No			
Has this organization or a participating or predecessor organization been released from a bid or proposal in the past 5 years? ☐ Yes* ☐ No			
Has this organization or a participating or predecessor organization ever defaulted on a project or failed to complete any contract awarded to it? ☐ Yes* ☐ No			
Has this organization or a participating or predecessor organization ever refused to construct or refused to provide materials defined in the contract documents or in a change order? ☐ Yes* ☐ No			
Is this organization or a participating or predecessor organization currently involved in any litigation or contemplating litigation? ☐ Yes* ☐ No			
Provide full details in a separate attachment for each statement above with a "yes" response above.			
Previous History with Owner			
List projects that have been completed with the Owner over the last 5 years. If more than 5 projects, list only the most recent.			
	Project Name		Year
1			
2			
3			
4			
5			
Previous Claims History and Litigation Experience			
List all claims or litigation involving owners on other construction projects that have been active over the last 5 years or that are currently unresolved.			
	Description of Claim or Litigation		Status
1			
2			
3			
4			
5			

Table 1 - General Information Cont'd

Surety								
Surety Name								
Mailing address (principal place of business):					Physical address (principal place of business):			
Telephone (main number)					Telephone (claims notices)			
Name of Local Agent for Surety								
Telephone				Email				
Surety is a corporation organized and existing under the laws of the state of								
Is surety authorized to provide surety bonds in the Project location? ☐ Yes ☐ No								
Is surety listed in the U.S. Department of the Treasury's Listing of Approved Sureties (Department Circular 570 "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies")? ☐ Yes ☐ No								
Insurance								
Name of Insurance Provider								
Provider is a corporation organized and existing under the laws of the state of								
Is Provider licensed or authorized to issue insurance policies in the Project location?							☐ Yes ☐ No	
Does Provider have an A.M. Best Rating of A-VIII or Better?							☐ Yes ☐ No	
Mailing Address (principal place of business)								
Physical Address (principal place of business)								
Telephone (main number)								
Telephone (for notice of claims)								
Local Agent for Provider								
Address for Local Agent								
Telephone for Local Agent								
Construction Site Safety Experience								
Provide Offeror's Experience Modification Ratio (EMR) and Total Recordable Frequency Rate (TRFR) for the last 3 years and the EMR and TRFR history for the last 3 years of any proposed Subcontractor that will provide Work valued at 25% or more of the Contract Price.								
Year	Offeror		Subcontractor		Subcontractor		Subcontractor	
	EMR	TRFR	EMR	TRFR	EMR	TRFR	EMR	TRFR
1								
2								
3								

Table 1 - General Information Cont'd

Financial Summary Information for Offeror		
Date of Offeror's most current financial statement		
Date of Offeror's most current audited financial statement		
Financial indicators from the most current financial statement:		
Offeror's Current Ratio = Current Assets ÷ Current Liabilities		
Offeror's Quick Ratio = (Cash and Cash Equivalents + Accounts Receivable + Short Term Investments) ÷ Current Liabilities		
Describe the resources that are available to the Offeror to provide adequate cash flow for the Project if Offeror's Current Ratio or Quick Ratio are less than 1.0:		
Disadvantaged Business Certifications		
Name of Certification	Certifying Agency	Certification Date
☐ Disadvantage Business Enterprise		
☐ Minority Business Enterprise		
☐ Woman Business Enterprise		
☐ Disabled Veteran Owned Business		
☐ Historically Underutilized Business		
☐ Small Business Enterprise		
☐ Other		
☐ None		

Table 2 - Current Projects and Project Completed within the last 5 Years

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Table 3 - Proposed Project Managers

Name of Organization			
Primary Candidate			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	
Alternate Candidate			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	

Table 4 - Proposed Project Superintendents

Name of Organization			
Primary Candidate			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	
Alternate Candidate			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	

Table 5 - Proposed Project Safety Managers

Name of Organization			
Primary Candidate			
Name of individual			
Years of experience as project safety manager			
Years of experience with this organization			
Number of similar projects as project safety manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	
Alternate Candidate			
Name of individual			
Years of experience as project safety manager			
Years of experience with this organization			
Number of similar projects as project safety manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	

Table 6 - Proposed Project Quality Control Managers

Name of Organization			
Primary Candidate			
Name of individual			
Years of experience as quality control manager			
Years of experience with this organization			
Number of similar projects as quality control manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	
Alternate Candidate			
Name of individual			
Years of experience as quality control manager			
Years of experience with this organization			
Number of similar projects as quality control manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment	Percent of time used for this project	Estimated project completion date	
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Role on project		Role on project	

Table 7 - Project Information for Key Personnel

Name of Organization							
Provide information on all projects completed by the Organization within the last 5 years.							
Project Owner				Project Name			
General Description of Project							
Project Budget and Schedule Performance							
Budget History	Amount	% of Bid Amount	Schedule Performance		Date	Days	
Original Contract Price			Notice to Proceed				
Change Orders			Contract Substantial Completion Date at Notice to Proceed				
Owner Enhancements			Contract Final Completion Date at Notice to Proceed				
Unforeseen Conditions			Change Order Authorized Substantial Completion Date				
Design Issues			Change Order Authorized Final Completion Date				
Total			Actual / Estimated Substantial Completion Date				
Final Cost			Actual / Estimated Final Completion Date				
Key Project Personnel							
		Project Manager		Project Superintendent		Safety Manager	
Name						Quality Control Manager	
Percentage of time devoted to the project							
Percentage of time proposed for this Project							
Did Individual start and complete the project?							
If not, who started or completed the project in their place?							
Reason for change?							
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)							
	Name	Title/Position		Organization	Telephone	Email	
Owner							
Designer							
Construction Manager							
Surety							
Issues / disputes resolved or pending resolution by arbitration, litigation or dispute review boards							
Number of issues resolved		Total amount involved in resolved issues		Number of issues pending		Total amount involved in issues pending	

Table 8 - Demonstration of Budget Performance

Name of Offeror							
Provide information on all projects completed by the Offeror within the last 5 years.							
Owner Name	Project Description	Original Contract Price	Value of Change Orders			Total Change Orders	Percent of Changes to Original Contract Price
			Owner Enhancements	Unforeseen Conditions	Design Issues		
Notes:							
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Table 9 - Demonstration of On-Time Performance

Name of Organization							
Provide information on all projects completed by the Organization within the last 5 years.							
Owner Name	Project Description	Original Contract Date for Substantial Completion	Original Contract Date for Final Completion	Amended Contract Date for Substantial Completion	Amended Contract Date for Final Completion	Actual Contract Date for Substantial Completion	Actual Contract Date for Final Completion
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00 61 13 PERFORMANCE BOND

Contractor as Principal Name: Mailing address (principal place of business):	Surety Name: Mailing address (principal place of business):
Owner Name: Mailing address (principal place of business):	Physical address (principal place of business): Telephone (Main): Telephone (Claims):
Contract Contract No.: Project name and number: Contract Price: Effective Date of Contract:	Surety's state of incorporation: <i>By submitting this bond, Surety affirms that it is licensed to provide and execute this bond and authorized to do business in the Oklahoma.</i> Local Agent for Surety Name: Mailing address (principal place of business):
Bond Bond Amount: 100 percent of Contract Price Date of Bond:	

(Date of Bond cannot be earlier than Effective Date of Contract)	Telephone (Main):
<i>Surety and Contractor, intending to be legally bound and obligated to Owner, do each cause this performance bond to be duly executed on its behalf by its authorized officer, agent, or representative. The Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally to this bond. The condition of this obligation is such that if the Contractor as Principal faithfully performs the Work required by the Contract then this obligation will be null and void; otherwise the obligation is to remain in full force and effect. Provisions of this bond shall be pursuant to the terms and provisions of Title 61 of the Oklahoma Statutes as amended and all liabilities on this bond shall be determined in accordance with the terms and provisions of said statutes to the same extent as if it were copied at length herein. Venue lies exclusively in Pottawatomie County, Oklahoma for any legal action.</i>	
Contractor as Principal Signature: _____ Name: _____ Title: _____ Email: _____	Surety Signature: _____ Name: _____ Title: _____ Email: _____ (Attach Power of Attorney and place surety seal below)

END OF SECTION

00 61 16 PAYMENT BOND

Contractor as Principal Name: Mailing address (principal place of business):	Surety Name: Mailing address (principal place of business):
Owner Name: Mailing address (principal place of business):	Physical address (principal place of business): Telephone (Main): Telephone (Claims):
Contract Contract No.: Project name and number: Contract Price: Effective Date of Contract:	Surety's state of incorporation: <i>By submitting this bond, Surety affirms that it is licensed to provide and execute this bond and authorized to do business in the Oklahoma.</i> Local Agent for Surety Name: Mailing address (principal place of business):
Bond Bond Amount: 100 percent of Contract Price Date of Bond: (Date of Bond cannot be earlier than Effective Date of Contract)	Telephone (Main):

Surety and Contractor intending to be legally bound and obligated to Owner do each cause this payment bond to be duly executed on its behalf by its authorized officer, agent, or representative. The Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally to this bond. The condition of this obligation is such that if the Contractor as Principal pays all claimants providing labor or materials to Contractor or to a Subcontractor in the prosecution of the Work required by the Contract then this obligation will be null and void; otherwise the obligation is to remain in full force and effect. Provisions of this bond shall be pursuant to the terms and provisions of Title 61 of the Oklahoma Statutes as amended and all liabilities on this bond shall be determined in accordance with the terms and provisions of said statutes to the same extent as if it were copied at length herein. Venue lies exclusively in Pottawatomie County, Oklahoma for any legal action.

Contractor as Principal

Signature: _____
 Name: _____
 Title: _____
 Email: _____

Surety

Signature: _____
 Name: _____
 Title: _____
 Email: _____

(Attach Power of Attorney and place surety seal below)

END OF SECTION

00 61 19 MAINTENANCE BOND

Contractor as Principal Name: Mailing address (principal place of business):	Surety Name: Mailing address (principal place of business):
Owner Name: Mailing address (principal place of business):	Physical address (principal place of business): Telephone (Main): Telephone (Claims):
Contract Project name and number: Contract Price: Effective Date of Contract:	Surety's state of incorporation: <i>By submitting this bond, Surety affirms it is authorized to do business and licensed to execute bonds in the state where the Project is located.</i> Local Agent for Surety Name: Mailing address (principal place of business):
Bond Bond Amount: 100 percent of Contract Price Bond Duration: Bond Date:	

(Date of Bond cannot be earlier than Effective Date of Contract)	Telephone (Main):
<i>Surety and Contractor, intending to be legally bound and obligated to Owner do each cause this maintenance bond to be duly executed on its behalf by its authorized officer, agent, or representative. Surety and Contractor bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally to this bond. The condition of this obligation is such that if the Contractor faithfully performs maintenance work required by the Contract Documents then this obligation will be null and void; otherwise the obligation is to remain in full force and effect. Provisions of the bond shall be pursuant to the terms and provisions of the Contract Documents with regard to the continued maintenance of the Project for the period specified in the Contract Documents. All liabilities on this bond will be determined in accordance with the provisions of said Contract Documents to the same extent as if they were copied at length herein. This Agreement shall be administered and interpreted under the laws of the state where the Project is located. Venue lies exclusively in Pottawatomie County, Oklahoma for any legal action.</i>	
Contractor as Principal Signature: _____ Name: _____ Title: _____ Email: _____	Surety Signature: _____ Name: _____ Title: _____ Email: _____ (Attach Power of Attorney)

END OF SECTION

00 61 20 MAINTENANCE BOND REQUIREMENTS

ARTICLE 1 – MAINTENANCE BOND REQUIREMENTS

- 1.01 Provide a maintenance bond that complies with the requirements of this Section. A maintenance bond is defined as a performance bond that extends the correction period for a specified period of time beyond the one-year correction period described in the General Conditions.
- 1.02 Provide a maintenance bond that begins at the end of the one-year correction period and continues for the period stated in Section 00 61 19 “Maintenance Bond.”
- 1.03 Provide a maintenance bond in the amount stated in Section 00 61 19 “Maintenance Bond.”
- 1.04 Provide a maintenance bond that meets the same requirements for bonds as the Contractor’s performance bond as described in the Contract Documents.
- 1.05 Surety for the maintenance bond must meet the same requirements for the performance and payment bonds as set forth in the General Conditions.
- 1.06 Indemnification provisions of the General Conditions apply to the maintenance bond period.

ARTICLE 2 – DOCUMENTATION

- 2.01 Provide a maintenance bond using the form provided in Section 00 61 19 “Maintenance Bond.”
- 2.02 Comply with the requirements of Section 01 70 00 “Execution and Closeout Requirements.”

ARTICLE 3 – CORRECTIVE ACTION DURING THE MAINTENANCE BOND PERIOD

- 3.01 Correct Defective Work during the one-year correction period in accordance with the General Conditions.
- 3.02 Correct Defective Work during the maintenance bond period just as required for the one-year correction period specified in the General Conditions. Provide labor and materials required to correct Defective Work or correct Work that does not function as required by the Contract Documents.
- 3.03 Correction of Defective Work during the maintenance bond period does not extend the correction period as is required under the provisions of the one-year correction period described in the General Conditions.
- 3.04 Promptly correct damages to the Site or adjacent areas that Contractor has arranged to use through construction easements or other agreements. Promptly correct damages to the Work or the work of others. Make the corrections without cost to Owner.
- 3.05 Owner may correct Defective Work without notice to Contractor in an emergency where delay would cause serious risk of loss or damage.
- 3.06 Include the cost for correcting Defective Work during the maintenance bond period in the Contract Price. Include all costs associated with providing the maintenance bond in the Contract Price.
- 3.07 Reimburse Owner for engineering and special services required to be furnished by Owner which are directly attributable to the corrective Work.

3.08 Remedy for Failure to Correct Defective Work:

- A. Owner may correct Defective Work if Contractor fails or refuses to perform corrective Work within 10 days after Owner notifies Contractor of Defective Work.
- B. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this paragraph are to be paid by Contractor or its surety. These claims, costs, losses, and damages include costs of repair and the cost of replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor's Defective Work. Owner is not required to obtain the lowest price for the Work performed when exercising its rights or remedies under this paragraph.

ARTICLE 4 – INSURANCE REQUIREMENTS

- 4.01 Provide insurance as required by the Contract Documents during the maintenance bond period. Provide evidence of insurance prior to beginning corrective Work if evidence of insurance is not current.

END OF SECTION

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. A term with initial capital letters, including the term's singular and plural forms, has the meaning indicated in this Paragraph wherever used in the Bidding Requirements or Proposal Requirements or Contract Documents. In addition to the terms specifically defined, terms with initial capital letters in the Contract Documents may include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Documents issued prior to the receipt of Bids or Proposals which clarify or modify the Bidding Requirements/Proposal Requirements or the proposed Contract Documents.
 2. *Agreement*—The document signed by Owner and Contractor that establishes the Contract Price and Contract Times, and designates the specific documents that are Contract Documents.
 3. *Application for Payment*—The documents used by Contractor to request payments from Owner and the supporting documentation required by the Contract Documents.
 4. *Bid; Proposal*—An offer submitted to Owner for the Project setting forth the Contract Price and Contract Times for the Work to be performed.
 5. *Bidding Documents; Proposal Documents*—The Bidding Requirements or Proposal Requirements, the proposed Contract Documents, and Addenda.
 6. *Bidding Requirements; Proposal Requirements*—The Invitation to Bid or Request for Proposals, Instructions to Offerors, Bid Security or Proposal Security, Bid Form or Proposal Form and attachments, and required certifications and affidavits.
 7. *Bid Security; Proposal Security*—The financial security provided by Offeror at the time the Bid or Proposal is submitted and held by Owner until the Agreement is executed and the evidence of insurance and bonds required by the Contract Documents are provided.
 8. *Change Order*—A document issued on or after the Effective Date of the Contract and signed by Owner and Contractor which modifies the Work, Contract Price, Contract Times, or terms and conditions of the Contract.
 9. *Change Proposal*—A document submitted by Contractor in accordance with the requirements of the Contract Documents:
 - a. Requesting an adjustment in Contract Price or Contract Times;
 - b. Contesting an initial decision concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents;
 - c. Challenging a Set-off against payment due; or
 - d. Seeking other relief with respect to the terms and conditions of the Contract.
 10. *Claim*—A demand or assertion by Owner or Contractor submitted in accordance with the requirements of the Contract Documents. A demand for money or services by an entity other than Owner or Contractor is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic, or dangerous waste, substance, or material.
12. *Construction Manager*—The individual or entity named as Construction Manager in the Agreement and the consultants, subconsultants, individuals, or entities directly or indirectly employed or retained by them to provide construction management as advisor services to Owner.
13. *Construction Manager at Risk (CMAR)*—The individual or entity selected by Owner to construct the Project using the Construction Manager at Risk project delivery method. The term Contractor means Construction Manager at Risk in the Contract Documents when the Construction Manager at Risk project delivery method is used.
14. *Contract*—The entire integrated set of documents concerning the Work and describing the relationship between the Owner and Contractor.
15. *Contract Amendment*—A document issued on or after the Effective Date of the Contract and signed by Owner and Contractor which:
 - a. Authorizes new phases of the Work and establishes the Contract Price, Contract Times, or terms and conditions of the Contract for the new phase of Work; or
 - b. Modifies the terms and conditions of the Contract, but does not make changes in the Work.
16. *Contract Documents*—Those items designated as Contract Documents in the Agreement.
17. *Contract Price*—The monetary amount stated in the Agreement and as adjusted by Modifications, and increases or decreases in unit price quantities, if any, that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
18. *Contract Times*—The number of days or the dates by which Contractor must achieve specified Milestones, achieve Substantial Completion, and complete the Work.
19. *Contractor*—The individual or entity with which Owner has contracted to perform the Work.
20. *Contractor's Team*—Contractor, Subcontractors, Suppliers, and individuals or entities directly or indirectly employed or retained by Contractor, Subcontractors, or Suppliers to perform part of the Work, or anyone for whose acts they may be liable.
21. *Cost of the Work*—The sum of costs incurred for the performance of the Work as allowed by Article 13.
22. *Day*—A day of 24 hours measured from midnight to the next midnight.
23. *Defective*—When applied to Work, refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. Does not conform to the Contract Documents;

- b. Does not meet the requirements of applicable inspections, reference standards, tests, or approvals referred to in the Contract Documents; or
 - c. Has been damaged prior to Construction Manager's recommendation of final payment unless responsibility for the protection of the Work has been assumed by Owner at Substantial Completion in accordance with Article 15.
24. *Design Professional*—The individuals or entity named as the Architect or Engineer in the Agreement and the subconsultants, individuals, or entities directly or indirectly employed or retained by Design Professional to provide design or other technical services to Owner. Design Professional has responsibility for design and technical issues related to the Contract Documents.
25. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work. Shop Drawings and other documents generated by Contractor's Team are not Drawings.
26. *Effective Date of the Contract*—The date indicated in the Agreement on which the Contract becomes effective.
27. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including Shop Drawings and other Submittals, that are in an electronic or digital format.
28. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
29. *Field Order*—A document issued by Construction Manager or Design Professional requiring changes in the Work that do not change the Contract Price or the Contract Times.
30. *Final Completion*—The point where the Work is complete in accordance with the Contract Documents, items and documents required by the Contract Documents have been accepted by Owner and the Project is ready for Final Payment.
31. *Guaranteed Maximum Price (GMP)*—The maximum amount to be paid by Owner for the sum of the Cost of the Work plus Contractor's fee as set forth in the Agreement, subject to increases or decreases for changes in the Work, when the Construction Manager at Risk project delivery method is used.
32. *Hazardous Environmental Condition*—The presence of Constituents of Concern at the Site in quantities or circumstances that may present a danger to persons or property exposed to Constituents of Concern. The presence of Constituents of Concern at the Site necessary for the execution of the Work or to be incorporated into the Work is not a Hazardous Environmental Condition provided these Constituents of Concern are

controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract.

- a. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
33. *Indemnified Costs*—All costs, losses, judgments, and damages resulting from claims or demands against Owner's Indemnitees. These costs include fees for design professionals, attorneys, and other professionals and any legal, court, arbitration, or other dispute resolution costs.
 34. *Laws and Regulations; Laws or Regulations*—Applicable laws, statutes, rules, regulations, ordinances, codes, permits, and binding decrees, resolutions, and orders of governmental bodies, agencies, authorities, and courts having jurisdiction over the Project.
 35. *Liens*—Charges, security interests, or encumbrances upon Contract related funds, real property, or private property.
 36. *Manufacturer*—The individual or entity that designs, casts, fabricates, manufactures, assembles, tests, and provides materials or equipment to be incorporated in the Work.
 37. *Milestone*—A principal event in the performance of the Work that Contractor is required by Contract to complete by a specified date or within a specified time.
 38. *Modification*—Change made to the Contract Documents by Contract Amendment, Change Order, Field Order, or Work Change Directive.
 39. *Notice of Award*—The notice of Owner's acceptance of the Successful Offeror's Bid or Proposal.
 40. *Notice to Proceed*—A notice to Contractor of the Contract Times and the date Work is to begin.
 41. *Offeror*—An individual or entity that submits a Bid or Proposal to Owner.
 42. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
 43. *Owner's Budget*—The amount budgeted by Owner for the construction of the Project.
 44. *Owner's Indemnitees*—Each member of OPT and their officers, directors, members, partners, employees, agents, consultants, and subcontractors.
 45. *Owner's Project Team (OPT)*—The Owner, Design Professional, Construction Manager, and the other entities identified in the Supplementary Conditions and the consultants, subconsultants, individuals or entities directly or indirectly employed or retained by them to provide services to Owner.

46. *Progress Schedule*—A schedule prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
47. *Project*—The total undertaking to be accomplished for Owner under the Contract Documents.
48. *Project Construction Manager (PCM)*—The authorized representative of OPT assigned to assist Construction Manager at the Site. The term Project Construction Manager includes assistants and field staff of Construction Manager.
49. *Project Management Information System (PMIS)*—The online project management system that will be used by OPT and Contractor to submit and share documentation and other related communications and information for this Project.
50. *Samples*—Physical examples of materials, equipment, or workmanship representing some portion of the Work that are used to establish the standards for that portion of the Work.
51. *Schedule of Anticipated Payments*—A detailed tabulation, prepared and maintained by Contractor, showing the anticipated amount of each Application for Payment and the month in which they will be submitted.
52. *Schedule of Submittals*—A detailed tabulation, prepared and maintained by Contractor, of each required submittal and the time requirements for review and approval of each submittal.
53. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for Contractor’s Applications for Payment.
54. *Set-off*—A reduction in payment due to Contractor under Article 15.
55. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by Contractor’s Team and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
56. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed. The Site includes rights-of-way, easements, and other lands or areas furnished by Owner which are designated for use by Contractor.
57. *Specifications*—The part of the Contract that describes the requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
58. *Subcontractor*—An individual or entity having a direct contract with Contractor or with other Subcontractors or Suppliers for the performance of a part of the Work.
59. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Construction Manager, or that is indicated as a Submittal in the Schedule of Submittals accepted by Construction Manager. Submittals, whether approved or accepted by OPT, are not Contract Documents.

60. *Substantial Completion*—The point where the Work or a specified part of the Work is sufficiently complete to be used for its intended purpose in accordance with the Contract Documents.
61. *Successful Offeror*—The Offeror to which Owner awards the Contract.
62. *Supplementary Conditions*—The part of the Contract that amends or supplements the General Conditions.
63. *Supplier*—A Manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with Subcontractors or other Suppliers to furnish materials or equipment to be incorporated in the Work.
64. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions with respect to either:
 - a. Existing subsurface conditions at or adjacent to the Site;
 - b. Existing physical conditions at or adjacent to the Site including existing surface or subsurface structures at the Site, except Underground Facilities; or
 - c. Hazardous Environmental Conditions at the Site.
65. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
66. *Unit Price Work*—Work to be paid for based on unit prices.
67. *Work*—The construction of the Project or its component parts as required by the Contract Documents. Work includes and is the result of performing and providing all labor, services, and documentation to construct the Project; providing all materials and equipment to be incorporated into the Project, and providing related services for testing, startup and commissioning, all as required by the Contract Documents.
68. *Work Change Directive*—A directive issued to Contractor on or after the Effective Date of the Contract ordering an addition, deletion, or revision in the Work. The Work Change Directive serves as a memorandum of understanding regarding the directive until a Change Order can be issued.

1.02 Terminology

- A. The words and terms discussed in this Paragraph 1.02 are not defined terms that require initial capital letters, but when used in the Bidding Requirements or Proposal Requirements or Contract Documents, have the indicated meaning.
- B. Contract Documents are written using imperative language:
 1. Simple imperative sentence structure is used which places a verb as the first word in the sentence. It is understood that the words “furnish,” “install,” “perform,” “provide,”

or similar words include the meaning of the phrase "Contractor shall..." before these words.

2. Unless specifically stated that action is to be taken by OPT or others, it is understood that the action described is a requirement of Contractor.
- C. The use of the words "furnish," "install," "perform," and "provide" have the following meanings when used relating to services, materials, or equipment:
 1. Furnish means to supply and deliver the specified services, materials, or equipment to the Site or other specified location ready for use or installation.
 2. Install means to complete construction or assembly of the specified services, materials, or equipment so they are ready for their intended use.
 3. Perform or provide means to furnish and install specified services, materials, or equipment, complete and ready for their intended use.
 4. Perform or provide the specified services, materials, or equipment complete and ready for intended use if the Contract Documents require specific services, materials, or equipment, but do not expressly use the words "furnish," "install," "perform," or "provide."
- D. The meaning and intent of certain terms or adjectives are described as follows:
 1. The terms "as allowed," "as approved," "as ordered," "as directed," or similar terms in the Contract Documents indicate an exercise of professional judgment by OPT.
 2. Adjectives like "reasonable," "suitable," "acceptable," "proper," "satisfactory," or similar adjectives are used to describe a determination of OPT regarding the Work.
 3. Any exercise of professional judgment by OPT will be made solely to evaluate the Work for general compliance with the Contract Documents unless there is a specific statement in the Contract Documents indicating otherwise.
 4. The use of these or similar terms or adjectives does not assign a duty or give OPT authority to supervise or direct the performance of the Work, or assign a duty or give authority to OPT to undertake responsibilities contrary to the provisions of Article 9, Article 10 or other provisions of the Contract Documents.
- E. Requirements apply to all Work of the same kind, class, and type even though the word "all" or "any" is not stated.
- F. The terms "includes" and "including" are used as terms of enlargement and not of limitation or exclusive enumeration, and use of these terms does not create a presumption that components not expressed are excluded. The terms "consist of" or "consisting of" limits the interpretation to only those items specifically listed.
- G. It is understood that the cost of providing Work is included in the Contract Price and no additional compensation is to be paid by Owner unless specifically stated otherwise in the Contract Documents. Expressions like "at no additional cost to Owner," "at Contractor's expense," or similar words mean that Contractor is to include the cost of this Work in their Contract Price and perform or provide specified Work without an increase in the Contract Price.

- H. Words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with this recognized meaning unless stated otherwise in the Contract Documents.
- I. Written documents are required where reference is made to notices, reports, approvals, consents, statements, instructions, opinions, or other types of documentation or communications required by the Contract Documents. Approval and consent documents must be received by Contractor prior to the action or decision for which approval or consent is given. These may be made in printed or electronic format through OPT's Project Management Information System or other electronic media as required by the Contract Documents or approved by Construction Manager.
- J. Giving notice as required by the Contract Documents may be by printed or electronic media using a method that requires acknowledgment of the receipt of that notice.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

- A. Provide required bonds and evidence of insurance required by the Contract Documents to Construction Manager with the executed Agreement.
- B. Evidence of insurance must include copies of the insurance policies, including all endorsements, and identification of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 Copies of Documents

- A. OPT will furnish one copy of the executed Contract Documents in electronic portable document format (PDF). This document is the Project Record Copy of the Contract Documents.

2.03 Before Starting Construction

- A. Provide the following preliminary documents in accordance with the Contract Documents within 10 days after the Effective Date of the Contract:
 - 1. Progress Schedule;
 - 2. Schedule of Submittals;
 - 3. Schedule of Values; and
 - 4. Schedule of Anticipated Payments.
- B. Designate the specific individuals authorized to act as representatives of Contractor. These individuals must have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of Contractor.
- C. Owner will designate the specific individuals authorized to act as representatives of Owner and the limits of their authority regarding acting on behalf of Owner.

2.04 Electronic Transmittals

- A. Except as otherwise stated elsewhere in the Contract Documents, the OPT and Contractor will send and accept Electronic Documents sent by Electronic Means using the protocols specified in Section 01 33 00 "Document Management."

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

- A. Requirements of each part of the Contract Documents are as binding as if required by all Contract Documents. It is the intent of the Contract Documents to describe a functionally complete project. The Contract Documents do not indicate or describe all the Work required to complete the Project. Additional details required for construction of the Project are to be provided by Contractor and coordinated with OPT.
- B. Provide the labor, documentation, services, materials, or equipment that may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result, whether specifically called for in the Contract Documents or not. Include these related costs in the offered Contract Price.
- C. Provide equipment that is functionally complete as described in the Contract Documents. The Drawings and Specifications do not indicate or describe all the Work required to complete the installation of equipment purchased by the Owner or Contractor. Additional details required for the correct installation of selected equipment are to be provided by Contractor and coordinated with Design Professional through Construction Manager.
- D. Comply with the most stringent requirements where compliance with two or more standards is specified and they establish different or conflicting requirements for the Work, unless the Contract Documents indicate otherwise.
- E. Provide materials and equipment comparable in quality to similar materials and equipment incorporated in the Project or as required to meet the minimum requirements of the application if the materials and equipment are shown in the Drawings but are not included in the Specifications.
- F. The Project Record Copy of the Contract Documents governs if there is a discrepancy between the Project Record Copy of the Contract Documents and subsequent electronic or digital versions of the Contract Documents, including printed copies derived from these electronic or digital versions.
- G. The Contract supersedes all prior written or oral negotiations, representations, and agreements. The Contract Documents comprise the entire Agreement between Owner and Contractor. The Contract Documents may be modified only by a Modification.
- H. Request clarification from Construction Manager for a decision before proceeding if Contractor is not clear on the meaning of the Contract Documents. Construction Manager is to issue clarifications and interpretations of the Contract Documents in accordance with the Contract Documents.

- I. Organization of the Documents:
 - 1. Organization of the Contract Documents is not intended to control or lessen the responsibility of Contractor when dividing Work among Subcontractors or Suppliers, or to establish the extent of Work to be performed by trades, Subcontractors, or Suppliers, except on multi-prime contracts. Specifications or details do not need to be indicated or specified in each Specification or Drawing. Items shown in the Contract Documents are applicable regardless of their location in the Contract Documents.
 - 2. Standard Paragraph titles and other identifications of subject matter in the Specifications are intended to aid in locating and recognizing various requirements of the Specifications. Titles do not define, limit, or otherwise restrict Specification text.
 - 3. The Contract requirements described in the General Conditions, Supplementary Conditions, and General Requirements (Division 01 Sections of the Specifications) apply to Work regardless of where it is described in the Contract Documents, unless specifically noted otherwise.
 - 4. Specifications or details do not need to be indicated or specified in each Specification or Drawing. Items shown in the Contract Documents are applicable regardless of their location in the Contract Documents.
- J. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- K. Nothing in the Contract Documents creates:
 - 1. a contractual relationship between OPT and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. an obligation on the part of OPT to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 Reference Standards

- A. Standard Specifications, Codes, Laws and Regulations:
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of technical societies, organizations, or associations, or to Laws or Regulations, whether specific or implied, are those in effect at the time Contractor's Bid or Proposal is submitted or when Contractor negotiates the Contract Price unless specifically stated otherwise in the Contract Documents.
 - 2. No provision of referenced standard specifications, manuals, reference standards, codes, or instructions of a Supplier changes the duties or responsibilities of OPT or Contractor from those described in the Contract Documents or assigns a duty to or gives authority to OPT to supervise or direct the performance of the Work or undertake responsibilities inconsistent with the Contract Documents.

3. The provisions of the Contract Documents take precedence over standard specifications, manuals, reference standards, codes, or instructions of a Supplier unless specifically stated otherwise in the Contract Documents.
- B. Comply with applicable construction industry standards, whether referenced or not.
 1. Standards referenced in the Contract Documents govern over standards not referenced but recognized as applicable in the construction industry.
 2. Comply with the requirements of the Contract Documents if they produce a higher quality of Work than the applicable construction industry standards.
 3. Submit questions regarding which code or standard is applicable to Construction Manager. Design Professional will determine whether a code or standard is applicable, which of several codes or standards are applicable, or if the Contract Documents produce a higher quality of Work. Construction Manager will respond to the question as appropriate.
- C. Make copies of reference standards available if requested by Construction Manager.

3.03 Reporting and Resolving Discrepancies

- A. Reporting Discrepancies:
 1. Carefully study the Drawings and verify pertinent figures and dimensions with respect to actual field measurements before undertaking the Work. Immediately report conflicts, errors, ambiguities, or discrepancies that Contractor discovers or has actual knowledge of to Construction Manager.
 2. Immediately notify the Construction Manager of conflicts, errors, ambiguities, or discrepancies in the Contract Documents or discrepancies between the Contract Documents and:
 - a. Applicable Laws or Regulations;
 - b. Actual field conditions;
 - c. Standard specifications, manuals, reference standards, or codes; or
 - d. Instructions of Suppliers.
 3. Do not proceed with affected Work until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation from Construction Manager or by a Modification to the Contract Documents issued pursuant to Paragraph 11.01, except in an emergency as required by Paragraph 7.12.
 4. Contractor is liable to OPT for failure to report conflicts, errors, ambiguities, or discrepancies in the Contract Documents of which Contractor has actual knowledge.
 5. Contractor is deemed to have included the most expensive item, system, procedure, etc. in the Contract Price if a conflict, error, ambiguity, or discrepancy in the Contract Documents was known, but not reported prior to submitting the Bid or Proposal or when Contractor negotiates the Contract Price.

3.04 Interpretation of the Contract Documents

- A. Submit questions concerning the non-technical or contractual/administrative requirements of the Contract Documents to Construction Manager immediately after the question arises. Construction Manager will provide an interpretation of the Contract Documents regarding these questions and will coordinate the response of OPT to Contractor.
- B. Submit questions regarding the design of the Project described in the Contract Documents to Construction Manager immediately after the question arises. Construction Manager will request an interpretation of the Contract Documents from Design Professional. Construction Manager will coordinate the response of OPT to Contractor.
- C. OPT may initiate a Modification to the Contract Documents through Construction Manager if a response to the question indicates that a change in the Contract Documents is required. Contractor may appeal Design Professional's or Construction Manager's interpretation by submitting a Change Proposal.

3.05 Reuse of Documents

- A. Contractor's Team has no rights to the Contract Documents and may not use the Contract Documents or copies or electronic media editions of the Contract Documents other than for the construction of this Project. This provision survives final payment or termination of the Contract.
- B. Contractor can retain a copy of the Contract Documents for record purposes, unless specifically prohibited by Owner for security reasons. Surrender paper and digital copies of the Contract Documents and other related documents and remove these documents from computer equipment or storage devices as a condition of final payment if Owner so directs.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 Commencement of Contract Times; Notice to Proceed

- A. The Contract Times commence to run on the date indicated in the Notice to Proceed. If a Notice to Proceed is not issued, the Contract Times will commence to run 15 days after the Contract is signed by all parties.
- B. Begin performing the Work on the date indicated in the Notice to Proceed. Do not begin Work before the date indicated in the Notice to Proceed or prior to providing evidence that insurance required in Article 6 is in effect.

4.02 Progress Schedule

- A. Construct the Work in accordance with the Progress Schedule established in accordance with the Contract Documents.
 - 1. Adjust the Progress Schedule as required to accurately reflect actual progress on the Work.
 - 2. Submit proposed adjustments in the Progress Schedule that change the Contract Times in accordance with the requirements of Article 11.

- B. Continue performing Work and adhere to the Progress Schedule during disputes or disagreements with Owner. Do not delay or postpone Work pending resolution of disputes or disagreements, or during an appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree.

4.03 Delays in Contractor's Progress

- A. Contractor is not entitled to an adjustment in Contract Price or Contract Times for delays, disruptions, or interference caused by or within the control of Contractor's Team.
- B. Contractor is entitled to an equitable adjustment in Contract Price or Contract Times if OPT directly delays, disrupts, or interferes with the performance or progress of the Work. Contractor is not entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Owner if this delay is concurrent with a delay, disruption, or interference attributable to or within the control of Contractor's Team.
- C. Contractor is entitled to an equitable adjustment in the Contract Times, but not Contract Price, if Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of OPT or Contractor. These adjustments in Contract Times are Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. These unanticipated causes include:
 - 1. Severe and unavoidable natural catastrophes e.g. fires, floods, epidemics, and earthquakes;
 - 2. Acts of war or terrorism;
 - 3. Acts or failures to act of utility owners or other third-party entities other than those third-party utility owners performing other work at or adjacent to the Site as arranged by Owner and, as contemplated in Article 8;
 - 4. The existence of a differing subsurface or physical condition;
 - 5. An Underground Facility not shown or not indicated with reasonable accuracy by the Contract Documents;
 - 6. Hazardous Environmental Conditions; and
 - 7. Delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site unless this other work also for Owner.
- D. Contractor is entitled to an equitable adjustment in the Contract Times, but not Contract Price, if Contractor's performance or progress is delayed or disrupted by weather conditions provided such weather conditions exceed those that could normally be expected for the Site in that month of the year, unless other provisions for Weather related delays are included in the Contract Documents. Contractor is to include time associated with normal weather-related delays in the Project Schedule and assumes the risks, including costs, associated with delays related to normal weather conditions.
- E. Contractor is only entitled to an adjustment of the Contract Times for specific delays, disruptions, and interference to the performance or progress of the Work that can be

demonstrated to directly impact the ability of Contractor to complete the Work within the Contract Times. No adjustments in Contract Times are allowed for delays on components of the Work which were or could have been completed without impacting the Contract Times.

- F. Notify Construction Manager immediately of a potential delaying, disrupting, or interfering event. Submit a Change Proposal seeking an adjustment in Contract Price or Contract Times within 30 days of the commencement of the delaying, disrupting, or interfering event. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11. Change Proposal seeking an increase in Contract Times or Contract Price submitted must include supporting data that details the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference;
 5. A revised Progress Schedule indicating all the activities affected by the delay, disruption, or interference;
 6. An explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work;
 7. The impact on Contract Price; and
 8. Such additional supporting documentation as OPT may require.

ARTICLE 5 – SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner will furnish the Site and inform Contractor of encumbrances or restrictions known to Owner related to use of the Site with which Contractor must comply in performing the Work.
- B. Provide for additional lands and access Contractor requires for temporary construction facilities or storage of materials and equipment, other than those identified in the Contract Documents. Provide documentation of authority to use these additional lands to Construction Manager before using them.

5.02 Use of Site and Other Areas

- A. Confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Owner or Contractor has arranged to use through construction easements or agreements, and other adjacent areas as permitted by Laws and Regulations. Assume full responsibility for damage

or injuries which result from the performance of the Work or from other actions or conduct of Contractor's Team, including:

1. Damage to the Site;
 2. Damage to adjacent areas used for Contractor's Team's operations;
 3. Damage to other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and
 4. Injuries and losses sustained by the owners or occupants of these lands or areas.
- B. Take the following action if a damage or injury claim is made by the owner or occupant of adjacent land or area because of the performance of the Work, or because of other actions or conduct of Contractor's Team:
1. Take immediate corrective or remedial action as required by Paragraph 7.10; and
 2. Attempt to settle the claim through negotiations with the owner or occupant, or otherwise resolve the claim by mediation or other dispute resolution proceeding or at law; and
 3. **TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, INDEMNIFY AND HOLD HARMLESS OWNER'S INDEMNITEES FROM AND AGAINST ANY SUCH CLAIM AND ALL INDEMNIFIED COSTS ARISING OUT OF OR RELATING TO ANY CLAIM OR ACTION BROUGHT BY ANY SUCH OWNER OR OCCUPANT AGAINST OWNER'S INDEMNITEES TO THE EXTENT CAUSED DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART BY, OR BASED UPON, CONTRACTOR'S PERFORMANCE OF THE WORK, OR BECAUSE OF OTHER ACTIONS OR CONDUCT OF CONTRACTOR'S TEAM.**

5.03 Subsurface and Physical Conditions

- A. The Supplementary Conditions identify:
1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
 2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site, except Underground Facilities, that contain Technical Data; and
 3. Technical Data contained in these reports and drawings.
- B. If no Technical Data have been identified in the Supplementary Conditions, then Technical Data is defined, with respect to conditions at the Site, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, or environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
- C. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.

- D. Contractor may rely upon the accuracy of the Technical Data contained in these reports and drawings, but these reports and drawings are not Contract Documents. Except for this reliance on Technical Data, Contractor may not rely upon or make claims against Owner's Indemnitees with respect to:
1. The completeness of reports and drawings for Contractor's purposes, including aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, or Contractor's safety precautions and programs;
 2. Other data, interpretations, opinions, and information contained in these reports or shown or indicated in the drawings;
 3. The contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. Contractor's interpretation of or conclusions drawn from Technical Data or other data, interpretations, opinions, or information.

5.04 Differing Subsurface or Physical Conditions

- A. Notify Construction Manager immediately, but in no event later than 3 days, after becoming aware of a subsurface or physical condition that is uncovered or revealed at the Site, and before further disturbing the subsurface or physical conditions or performing any related Work that:
1. Establishes that the Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. Requires a change in the Drawings or Specifications;
 3. Differs materially from that shown or indicated in the Contract Documents; or
 4. Is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.
- B. Do not further disturb or perform Work related to this subsurface or physical condition, except in an emergency as required by Paragraph 7.12, until permission do so is issued by Construction Manager.
- C. Construction Manager is to notify OPT after receiving notice of a differing subsurface or physical condition from Contractor. OPT will:
1. Promptly review the subsurface or physical condition;
 2. Determine the necessity of OPT's obtaining additional exploration or tests with respect to the subsurface or physical condition;
 3. Determine if the subsurface or physical condition falls within one or more of the differing site condition categories in Paragraph 5.04.A;
 4. Prepare recommendations regarding Contractor's resumption of Work relating to the subsurface or physical condition in question;
 5. Determine the need for changes in the Drawings or Specifications; and

6. Advise Contractor of OPT's findings, conclusions, and recommendations.
- D. Construction Manager is to issue a statement to Contractor regarding the subsurface or physical condition in question and recommend action as appropriate after review of OPT's findings, conclusions, and recommendations. Construction Manager may instruct Contractor to resume Work if OPT determines that the subsurface or physical condition in question has been adequately documented.
- E. Contractor is entitled to an equitable adjustment in Contract Price or Contract Times to the extent that a differing subsurface or physical condition causes a change in Contractor's cost or time to perform the Work provided the condition falls within one or more of the categories described in Paragraph 5.04.A. Any adjustment in Contract Price for Work that is paid for on a unit price basis is subject to the provisions of Paragraph 13.03. Contractor is not entitled to an adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 1. Contractor knew of the existence of the subsurface or physical condition at the time Contractor made an offer to Owner with respect to Contract Price and Contract Times;
 2. The existence of the subsurface or physical condition could have been discovered or revealed by examinations, investigations, explorations, tests, or studies of the Site and contiguous areas expressly required by the Bidding Requirements or Proposal Requirements or the Contract Documents prior to when Contractor's Bid or Proposal is submitted or when Contractor negotiates the Contract Price; or
 3. Contractor failed to give notice as required by Paragraph 5.04.A.
- F. Contractor may submit a Change Proposal no later than 30 days after Construction Manager's issuance of the OPT's statement to Contractor regarding the subsurface or physical condition in question.

5.05 Underground Facilities

- A. The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to OPT by the owners of these Underground Facilities or by others. OPT is not responsible for the accuracy or completeness of information or data provided by others that OPT makes available to Contractor. Contractor is responsible for:
 1. Reviewing and checking available information and data regarding existing Underground Facilities at the Site;
 2. Complying with Laws and Regulations related to locating Underground Facilities before beginning Work;
 3. Locating Underground Facilities shown or indicated in the Contract Documents;
 4. Coordinating the Work with the owners, including Owner, of Underground Facilities during construction; and
 5. The safety and protection of existing Underground Facilities at or adjacent to the Site and repairing damage resulting from the Work.
- B. Notify Construction Manager and the owner of the Underground Facility immediately if an Underground Facility is uncovered or revealed at the Site that was not shown in the

Contract Documents or was not shown with reasonable accuracy in the Contract Documents. Do not further disturb conditions or perform Work affected by this discovery, except in the event of an emergency as required by Paragraph 7.12.

- C. OPT is to take the following action after receiving notice from Construction Manager:
 - 1. Promptly review the Underground Facility to determine if the Underground Facility was shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy;
 - 2. Identify and communicate with the owner of the Underground Facility;
 - 3. Prepare recommendations to OPT regarding Contractor's resumption of Work relating to this Underground Facility;
 - 4. Determine the extent to which a change is required in the Drawings or Specifications to document the consequences of the existence or location of the Underground Facility; and
 - 5. Construction Manager will advise Contractor of OPT's findings, conclusions, and recommendations and provide revised Drawings and Specifications if required.
- D. Construction Manager is to issue a statement to Contractor regarding the Underground Facility in question and recommend action as appropriate after review of OPT's findings, conclusions, and recommendations.
- E. Contractor is entitled to an equitable adjustment in the Contract Price or Contract Times to the extent that the existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy. Any adjustment in Contract Price for Work that is paid for on a unit price basis is subject to the provisions of Paragraph 13.03.
- F. Contractor is not entitled an adjustment in the Contract Price or Contract Times with respect to an existing Underground Facility at the Site if:
 - 1. Contractor knew of the existence of the existing Underground Facility at the Site at the time Contractor made an offer to Owner with respect to Contract Price and Contract Times;
 - 2. The existence of the existing Underground Facility at the Site could have been discovered or revealed by examinations, investigations, explorations, tests, or studies of the Site and contiguous areas expressly required by the Bidding Requirements or Proposal Requirements or the Contract Documents prior to when Contractor's Bid or Proposal is submitted or when Contractor negotiates the Contract Price; or
 - 3. Contractor failed to give notice as required by Paragraph 5.05.B.
- G. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of adjustments in the Contract Price or Contract Times no later than 30 days after Construction Manager's issuance of OPT's statement to Contractor regarding the Underground Facility.

5.06 Hazardous Environmental Conditions at Site

- A. The Supplementary Conditions identify those reports and drawings known to OPT relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and the Technical Data contained in these reports and drawings.
- B. Contractor may rely upon the accuracy of the Technical Data contained in reports and drawings relating to Hazardous Environmental Conditions identified in the Supplementary Conditions, but these reports and drawings are not Contract Documents. Except for the reliance on expressly identified Technical Data, Contractor may not rely upon or make claims against Owner's Indemnitees with respect to:
 - 1. The completeness of these reports and drawings for Contractor's purposes, including aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor or Contractor's safety precautions and programs related to Hazardous Environmental Conditions;
 - 2. Other data, interpretations, opinions, and information contained in these reports or shown or indicated in the drawings; or
 - 3. Any Contractor interpretation of or conclusion drawn from Technical Data or other data, interpretations, opinions, or information.
- C. The results of tests performed on materials described in environmental reports specifically prepared for the Project and made available to Contractor are defined as Technical Data unless Technical Data has been defined more specifically in the Supplementary Conditions.
- D. Contractor is not responsible for removing or remediating Hazardous Environmental Conditions encountered, uncovered, or revealed at the Site unless this removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- E. Contractor is responsible for controlling, containing, and duly removing and remediating Constituents of Concern brought to the Site by Contractor's Team and paying associated costs.
 - 1. Owner may remove and remediate the Hazardous Environmental Condition and impose a Set-off against payments to Contractor for associated costs if Contractor's Team creates a Hazardous Environmental Condition and Contractor does not take acceptable action to remove and remediate the Hazardous Environmental Condition.
 - 2. **TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER'S INDEMNITEES FROM AND AGAINST ALL CLAIMS AND INDEMNIFIED COSTS ARISING OUT OF OR RELATING TO THE FAILURE TO CONTROL, CONTAIN, OR REMOVE A CONSTITUENT OF CONCERN BROUGHT TO THE SITE BY CONTRACTOR'S TEAM, OR TO A HAZARDOUS ENVIRONMENTAL CONDITION CREATED BY CONTRACTOR'S TEAM. NOTHING IN THIS PARAGRAPH SHALL OBLIGATE CONTRACTOR TO INDEMNIFY ANY INDIVIDUAL OR ENTITY FROM AND AGAINST THE CONSEQUENCES OF THAT INDIVIDUAL'S OR ENTITY'S OWN NEGLIGENCE.**

- F. Immediately notify Construction Manager and take the following action if Contractor uncovers or reveals a Hazardous Environmental Condition at the Site or adjacent areas used by Contractor's Team that was not created by Contractor's Team:
 - 1. Secure or otherwise isolate this condition;
 - 2. Stop Work in affected areas or connected with the condition, except in an emergency as required by Paragraph 7.12; and
 - 3. Do not resume Work relating to the Hazardous Environmental Condition or in affected areas until after OPT has obtained required permits and Construction Manager sends notice to Contractor:
 - a. Specifying that this condition and affected areas are or have been rendered safe for the resumption of Work; or
 - b. Specifying special conditions under which Work may be resumed safely.
 - 4. Owner may order the portion of the Work that is in the area affected by the Hazardous Environmental Condition to be deleted from the Work following the procedures in Article 11 if Contractor does not agree to:
 - a. Resume the Work based on a reasonable belief it is unsafe; or
 - b. Resume the Work under the special conditions provided by Construction Manager.
 - 5. Owner may have this deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- G. Contractor may submit a Change Proposal or Owner may impose a Set-off if an agreement is not reached within 10 days of Construction Manager's notice regarding the resumption of Work as to whether Contractor is entitled to an adjustment in Contract Price or Contract Times or on the amount or extent of adjustments resulting from this Work stoppage or special conditions under which Contractor agrees to resume Work.
- H. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

- A. Furnish a performance bond in an amount equal to the Contract Price as security for the faithful performance of Work. Contractor is to use amounts paid by Owner to Contractor under the Contract for the performance of the Contract. This bond is to remain in effect until 1 year after the date of final payment.
- B. Furnish a payment bond in an amount equal to the Contract Price as security to ensure payment of Contractor's obligations under the Contract Documents. This bond is to remain in effect until 1 year after the date of final payment.
 - 1. Notify Construction Manager of claims filed against the payment bond. Notify the claimant and Construction Manager of undisputed amounts and the basis for

challenging disputed amounts when a claimant has satisfied the conditions prescribed by Laws and Regulations. Promptly pay undisputed amounts.

2. Owner is not liable for payment of costs or expenses of claimants under the payment bond. Owner has no obligations to pay, give notice, or take other action to claimants under the payment bond.
 3. OPT will provide a copy of the payment bond and payment information to Subcontractors, Suppliers, or other persons or entities claiming to have furnished labor or materials used in the performance of the Work that request this information in accordance with Laws and Regulations.
- C. Notify Construction Manager immediately if the surety on bonds furnished by Contractor:
1. Is declared bankrupt, or becomes insolvent;
 2. Has its right to do business in state in which the Project is located is terminated; or
 3. Ceases to meet the requirements of Paragraph 6.02.
- D. Provide a bond and surety which comply with the requirements of Paragraph 6.02 within 20 days after the event giving rise to this notification.
- E. Furnish other bonds as required by the Contract Documents.
- F. Owner may exclude Contractor from the Site and exercise Owner's termination rights under Article 16 if Contractor fails to obtain or maintain required bonds.

6.02 Licensed Sureties

- A. Provide bonds in the form prescribed by the Contract Documents from sureties named in the U.S. Department of the Treasury's Listing of Approved Sureties (Department Circular 570 "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies").
- B. Provide bonds required by the Contract Documents from surety companies that are duly licensed or authorized to provide bonds in the state in which the Project is constructed.

6.03 Insurance - General Provisions

- A. Obtain and maintain insurance with coverage amounts equal to or greater than the amounts specified in Section 00 73 16 "Insurance Requirements" or greater where required by Laws and Regulations.
- B. Obtain insurance from companies that are duly licensed or authorized in the state in which the Project is constructed to issue insurance policies and that have an A.M. Best rating of A-VIII or better.
- C. Deliver evidence of insurance in accordance with Section 00 73 16 "Insurance Requirements" to Owner to demonstrate that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Provide copies of these certificates to Owner and additional insured.
- D. Furnish copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles upon request by Owner or any additional insured. Contractor

may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this paragraph.

- E. OPT's failure to demand such certificates or other evidence of Contractor's full compliance with the insurance requirements or failure to identify a deficiency in compliance from the evidence provided is not a waiver of Contractor's obligation to obtain and maintain the insurance required by the Contract Documents.
- F. Notify Owner if Contractor fails to purchase or maintain the insurance required by the Contract Documents. Do not perform any Work on the Project unless the required insurance policies are in effect. Owner may exclude Contractor from the Site and exercise Owner's termination rights under Article 16 if Contractor fails to obtain or maintain the required insurance.
- G. Owner may elect to obtain equivalent insurance to protect Owner's interests without prejudice to any other right or remedy if Contractor fails to obtain or maintain the required insurance. Owner may impose a reasonable Set-off against payments due under Article 15 to recover the cost of the insurance.
- H. Owner does not represent that the insurance coverage and limits established in this Contract are adequate to protect Contractor or Contractor's interests.
- I. The required insurance and insurance limits do not limit Contractor's liability under the indemnities granted to Owner's Indemnitees in the Contract Documents.
- J. Provide for an endorsement that the "other insurance" clause will not apply to OPT where OPT is an additional insured shown on the policy. Contractor's insurance is primary and non-contributory with respect to any insurance or self-insurance carried by OPT for liability arising out of operations under this Agreement.
- K. Include and list OPT and any other individuals or entities identified in the Section 00 73 16 "Insurance Requirements" as additional insureds on all policies except for the workers' compensation policy and Contractor's professional liability policy.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 Contractor's Means and Methods of Construction

- A. Contractor is solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. Provide professional engineering or other design services if the Contract Documents require such services or if Contractor determines that such services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety. Engineering or other design services are to be provided by a properly licensed design professional authorized to provide these services in the state in which the Project is constructed. Such services are not Owner-delegated professional design services under this Contract, and OPT does not have any responsibility with respect to:
 - 1. Contractor's determination of the need for such services;

2. The qualifications or licensing of the design professionals retained or employed by Contractor;
3. The performance of such services; or
4. Any errors, omissions, or defects in such services.

7.02 Supervision and Superintendence

- A. Supervise, inspect, and direct the performance of the Work.
- B. Provide a competent resident superintendent acceptable to OPT. The resident superintendent or acceptable qualified assistant is to always be present when Work is being done. Do not replace this resident superintendent except under extraordinary circumstances. Provide a replacement resident superintendent equally competent to the previous resident superintendent if replacement is required. Notify Owner prior to replacing the resident superintendent and obtain Owner's consent to the change in superintendent.

7.03 Labor; Working Hours

- A. Provide competent, suitably qualified personnel to complete the Work. Maintain good discipline and order at the Site. Contractor is responsible for all acts and omissions of Contractor's Team.
- B. Perform Work at the Site during regular working hours except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent to the Site and except as otherwise stated in the Contract Documents.
- C. Do not perform Work on a Saturday, Sunday, or Owner-observed holiday without Construction Manager's consent. If a legal holiday falls on a Saturday, it will be observed the preceding Friday. If a legal holiday falls on a Sunday, it will be observed the following Monday.
- D. Pay additional cost incurred by Owner for services of Construction Manager to observe Work constructed outside of regular working hours. Construction Manager will issue a Set-off in the Application for Payment for this cost per Paragraph 15.01.B.

7.04 Services, Materials, and Equipment

- A. Provide services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and other facilities and incidentals necessary for the performance, testing, startup, and completion of the Work, whether or not these items are specifically called for in the Contract Documents.
- B. Provide new materials and equipment to be incorporated into the Work. Provide special warranties and guarantees required by the Contract Document. Provide satisfactory evidence, including reports of required tests, as to the source, kind, and quality of materials and equipment as required by the Contract Documents or as requested by Construction Manager.

- C. Store, apply, install, connect, erect, protect, use, clean, and condition materials and equipment in accordance with instructions of the applicable Supplier, unless otherwise required by the Contract Documents.

7.05 Concerning Subcontractors, and Suppliers

- A. Contractor may retain Subcontractors and Suppliers which are acceptable to Owner for the performance of parts of the Work. Contractor must retain specific Subcontractors or Suppliers if required to do so by the Contract Documents. Contractor must use Subcontractors or Suppliers named in the Bid or Proposal if Contractor was selected in part based on these named Subcontractors or Suppliers.
- B. Submit a list of proposed Subcontractors and Suppliers to Construction Manager prior to entering into binding subcontracts or purchase orders. These proposed Subcontractors or Suppliers are deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 10 days after receiving this list.
- C. Owner may require the replacement of Subcontractors or Suppliers retained by Contractor. Provide an acceptable replacement for the rejected Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements, subject to Contractor's reasonable objections.
- D. Contractor may be entitled to an adjustment in Contract Price or Contract Times with respect to a replacement of Subcontractors or Suppliers required by Owner. Notify Construction Manager immediately if a replacement of Subcontractors or Suppliers increases the Contract Price or Contract Times. Initiate a Change Proposal for the adjustment within 10 days of Owner's notice to replace a Subcontractor or Supplier. Do not make the replacement until the change in Contract Price or Contract Times has been accepted by Owner if Change Proposal is to be submitted. Contractor is not entitled to an adjustment in Contract Price or Contract Times if OPT requires the replacement of the Subcontractor or Supplier based on an unacceptable safety record, lack of experience or qualifications, or other cause.
- E. Acceptance by Owner of Subcontractors, Suppliers, or other individuals or entities, whether initially or as a replacement, does not constitute a waiver of the obligation of Contractor to complete the Work in accordance with the Contract Documents.
- F. Maintain a current and complete list of Subcontractors and Suppliers that are to perform or furnish part of the Work.
- G. Contractor is fully responsible for the acts and omissions of Subcontractors and Suppliers and is solely responsible for scheduling and coordinating their Work.
- H. Require Subcontractors, Suppliers, and other individuals or entities performing or furnishing Work to communicate with OPT through Contractor.
- I. Contracts between Contractor and their Subcontractors or Suppliers may specifically bind the Subcontractors or Suppliers to the applicable terms and conditions of the Contract Documents. Contractor is responsible for meeting the requirements of the Contract Documents if they choose to not bind the Subcontractors or Suppliers to applicable terms or conditions of the Contract Documents.

- J. OPT may furnish information about amounts paid to Contractor for Work provided by Subcontractors or Suppliers to the entity providing the Work.
- K. Nothing in the Contract Documents:
 - 1. Creates a contractual relationship between members of OPT and members of Contractor's Team; or
 - 2. Creates an obligation on the part of Owner to pay or to see to the payment of money due members of Contractor's Team, except as may be required by Laws and Regulations.

7.06 Patent Fees and Royalties

- A. Pay license fees, royalties, and costs incident to the use of inventions, designs, processes, products, or devices which are patented or copyrighted by others in the performance of the Work, or to incorporate these inventions, designs, processes, products, or devices which are patented or copyrighted by others in the Work. The Contract Documents identify inventions, designs, processes, products, or devices OPT knows are patented or copyrighted by others, or that its use is subject to patent rights or copyrights calling for the payment of a license fee or royalty to others. Contractor is to include the cost associated with the use of patented or copyrighted products or processes, whether specified or selected by Contractor, in the Contract Price.
- B. **TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER'S INDEMNITEES FROM AND AGAINST ALL CLAIMS AND INDEMNIFIED COSTS ARISING OUT OF OR RELATING TO ANY INFRINGEMENT OF PATENT RIGHTS OR COPYRIGHTS BY CONTRACTOR'S TEAM INCIDENT TO THE USE IN THE PERFORMANCE OF THE WORK OR RESULTING FROM THE INCORPORATION IN THE WORK OF ANY INVENTION, DESIGN, PROCESS, PRODUCT, OR DEVICE.**

7.07 Permits

- A. Obtain and pay for construction permits and licenses, and certificates of occupancy, if required. OPT is to assist Contractor in obtaining permits and licenses when required to do so by applicable Laws and Regulations. Pay governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time the Contractor's Bid or Proposal is submitted or when Contractor negotiates the Contract Price.

7.08 Taxes

- A. Contractor is responsible for all taxes and duties arising out of the Work. Contractor is responsible for including in the Contract Price any applicable sales and use taxes and is responsible for complying with all applicable Laws and Regulations. Pay sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations.

7.09 Laws and Regulations

- A. Give required notices and comply with Laws and Regulations applicable to the performance of the Work. OPT is not responsible for monitoring Contractor's compliance with Laws or Regulations except where expressly required by applicable Laws and Regulations.

- B. Pay costs resulting from actions taken by Contractor that are contrary to Laws or Regulations. Contractor is not responsible for determining that the design aspects of the Work described in the Contract Documents is in accordance with Laws and Regulations. This does not relieve Contractor of its obligations under Paragraph 3.03.
- C. **TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD OWNER'S INDEMNITEES HARMLESS FROM ALL CLAIMS AND INDEMNIFIED COSTS RESULTING FROM ACTIONS TAKEN BY CONTRACTOR'S TEAM THAT ARE CONTRARY TO LAWS OR REGULATIONS.**
- D. Owner or Contractor may give notice to the other party of changes in Laws or Regulations that may affect the cost or time of performance of the Work, including:
 - 1. Changes in Laws or Regulations affecting procurement of permits; and
 - 2. Sales, use, value-added, consumption, and other similar taxes which come into effect after Contractor's Bid or Proposal is submitted or when Contractor negotiates the Contract Price.
- E. Contractor may submit a Change Proposal or Owner may initiate a Claim within 30 days of this notice if Owner and Contractor are unable to agree on entitlement to or on the amount or extent of adjustments in Contract Price or Contract Times resulting from these changes.

7.10 Safety and Protection

- A. Contractor is solely responsible for initiating, maintaining, and supervising safety precautions and programs relating to the Work. This responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their Work, nor for compliance with applicable safety Laws and Regulations.
- B. Take necessary precautions for the safety of persons on the Site or who may be affected by the Work, and provide the necessary protection to prevent damage, injury, or loss to:
 - 1. Work and materials and equipment to be incorporated in the Work, whether stored on or off the Site; and
 - 2. Other property at or adjacent to the Site, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement during construction.
- C. Comply with applicable Laws and Regulations relating to the safety and protection of persons or property. Erect and maintain necessary safeguards for safety and protection. Notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site when prosecution of the Work may affect them. Cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- D. Remedy damage, injury, or loss to property referred to in Paragraph 7.10.B caused by Contractor's Team. Pay remediation costs unless the damage or loss is:
 - 1. Attributable to the fault of the Contract Documents;
 - 2. Attributable to acts or omissions of OPT; or

- 3. Not attributable to the actions or failure to act of Contractor's Team.
- E. Contractor's duties and responsibilities for safety and protection of persons or the Work or property at or adjacent to the Site continues until Work is completed and resumes whenever Contractor's Team returns to the Site to fulfill warranty or correction obligations or to conduct other tasks.
- F. Comply with the applicable requirements of the Owner's safety program if required to do so in the Supplementary Conditions. A copy of the Owner's safety program will be provided in the Bidding Documents or Proposal Documents.
- G. Provide a qualified and experienced safety representative at the Site whose duties and responsibilities are the prevention of accidents and maintaining and supervising safety programs.

7.11 Hazard Communication Programs

- A. Coordinate the exchange of safety data sheets or other hazard communication information required to be made available or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.12 Emergencies

- A. Act to prevent threatened damage, injury, or loss in emergencies affecting the safety or protection of persons or the Work or property at or adjacent to the Site. Notify Construction Manager immediately if Contractor believes that significant changes in the Work or variations from the Contract Documents have been caused or are required because of this need to act. A Modification is to be issued by Construction Manager if OPT determines that the incident giving rise to the emergency action was not the responsibility of Contractor and that a change in the Contract Documents is required because of the action taken by Contractor in response to this emergency.

7.13 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that Work is in accordance with the Contract Documents and is not Defective. Owner is entitled to rely on Contractor's warranty and guarantee. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 7.14. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.13 is limited only by applicable Laws and Regulations restricting actions to enforce such rights. Assume and bear responsibility for costs and time delays associated with variations from the requirements of the Contract Documents.
- B. This Contractor's warranty and guarantee excludes defects or damage caused by abuse, improper maintenance or operation, or modification by OPT; or normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete Work in accordance with the Contract Documents is absolute. None of the following constitute an acceptance of Defective Work,

a release of Contractor's obligation to perform Work in accordance with the Contract Documents or a release of Owner's warranty or guarantee rights under this Paragraph:

1. Observations by OPT;
 2. Recommendation by Construction Manager or payment by Owner of progress or final payments;
 3. The issuance of a certificate of Substantial Completion;
 4. The issuance of a certificate of Final Completion;
 5. The end of the correction period established in Paragraph 7.14;
 6. Use or occupancy of part of the Work by Owner;
 7. Review and approval of a Shop Drawing or Sample;
 8. Inspections, tests, or approvals by others; or
 9. Correction of Defective Work by Owner.
- D. The Contract Documents may require Contractor to accept the assignment of a contract between the Owner and a contractor or supplier. The specific warranties, guarantees, and correction obligations contained in an assigned contract govern with respect to Contractor's performance obligations to Owner for the Work described in an assigned contract.

7.14 Correction Period

- A. Promptly correct Defective Work without cost to Owner for 1 year after the date of Substantial Completion or longer periods of time prescribed by the terms of the Contract Documents.
- B. Promptly correct damages to the Site or adjacent areas that Contractor has arranged to use through construction easements or other agreements. Promptly correct damages to Work or the work of others. Make corrections without cost to Owner.
- C. Owner may have the Defective Work and damages described in Paragraphs 7.14.A and 7.14.B corrected if Contractor does not comply with the terms of Construction Manager's instructions, or in an emergency where delay would cause serious risk of loss or damage.
- D. **NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT OR THE CONTRACT DOCUMENTS AND TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD OWNER'S INDEMNITEES HARMLESS FROM AND AGAINST ALL CLAIMS AND INDEMNIFIED COSTS ARISING OUT OF OR RELATING TO THE CORRECTION OF DEFECTIVE WORK.**
- E. The correction period starts to run from the date when a specific item of equipment or systems are placed in continuous beneficial use by Owner before Substantial Completion of Work if so provided in the Specifications or if accepted for beneficial use by Owner.
- F. The correction period is extended for an additional period of 1 year for Defective Work corrected after the date of Substantial Completion or after the accepted date the correction period starts to run as described in Paragraph 7.14.E. This extended correction

period starts to run when Defective Work has been satisfactorily corrected under this Paragraph 7.14.

- G. Contractor's obligations under this Paragraph 7.14 are in addition to other obligations or warranties. The provisions of this Paragraph 7.14 are not a substitute for, or a waiver of, the provisions of applicable statutes of limitation or repose.

7.15 Indemnification

- A. **TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, AND IN ADDITION TO ANY OTHER OBLIGATIONS OF CONTRACTOR UNDER THE CONTRACT OR OTHERWISE, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER'S INDEMNITEES FROM AND AGAINST ALL CLAIMS AND INDEMNIFIED COSTS ARISING OUT OF OR RELATING TO THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, ACTION, LOSS, OR DAMAGE IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE, OR DEATH, OR TO DAMAGE TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF), INCLUDING THE LOSS OF USE RESULTING THEREFROM BUT ONLY TO THE EXTENT CAUSED BY ANY NEGLIGENT ACT OR OMISSION OF CONTRACTOR'S TEAM.**
- B. The indemnification obligation under Paragraph 7.15.A is not limited by the amount or type of damages, compensation, or benefits payable by or for members of Contractor's Team or other individuals or entities under workers' compensation acts, disability benefit acts, or other employee benefit acts in claims against Owner's Indemnitees by an employee or the survivor or personal representative of employee of Contractor's Team.

7.16 Delegation of Professional Design Services

- A. Contractor is to provide professional design services required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures.
- B. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. This delegation will specify the performance and design criteria that such services must satisfy and the Submittals that Contractor must furnish to Construction Manager with respect to Owner delegated design. Contractor is not required to provide these professional services in violation of applicable Laws and Regulations.
- C. Owner-delegated professional design services provided through Contractor are to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and other Submittals prepared by such design professional. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Construction Manager, then such Shop Drawing or other Submittal must bear the design professional's written approval when submitted by Contractor to Construction Manager.
- D. OPT is entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by Contractor's design professionals, provided OPT has specified to Contractor the performance and design criteria that these services must satisfy.

- E. Pursuant to this Paragraph 7.16, OPT's review and approval of design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this paragraph;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor is not responsible for the adequacy of the performance or design criteria specified by OPT. Advise OPT if the performance or design criteria are known or considered likely to be inadequate or otherwise deficient.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 Other Work

- A. Owner may arrange for other work at or adjacent to the Site which is not part of the Contractor's Work. This other work may be performed by Owner's employees or through other contractors. Utility owners may perform work on their utilities and facilities at or adjacent to the Site. Include costs associated with coordinating with entities performing other work or associated with connecting to this other work in the Contract Price if this other work is shown in the Contract Documents.
- B. OPT is to notify Contractor of other work prior to starting the work and provide any knowledge they have regarding the start of utility work at or adjacent to the Site to Contractor.
- C. Provide other contractors:
 - 1. Proper and safe access to the Site;
 - 2. Reasonable opportunity for the introduction and storage of materials and equipment; and
 - 3. Reasonable opportunity to execute their work.
- D. Provide cutting, fitting, and patching of the Work required to properly connect or integrate with other work. Do not endanger the work of others by cutting, excavating, or otherwise altering the work of others without the consent of Construction Manager and the others whose work will be affected.
- E. Inspect the work of others and immediately notify Construction Manager if the proper execution of part of Contractor's Work depends upon work performed by others and this work has not been performed or is unsuitable for the proper execution of Contractor's Work. Contractor's failure to notify Construction Manager constitutes an acceptance of this other work as acceptable for integration with Contractor's Work. This acceptance does not apply to latent defects or deficiencies in the work of others.
- F. Take adequate measures to prevent damages, delays, disruptions, or interference with the work of Owner, other contractors, or utility owners performing other work at or adjacent to the Site.

- G. The provisions of this Article 8 are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.03.

8.02 Coordination

- A. Owner has sole authority and responsibility for coordination of this other work unless otherwise provided in the Contract Documents. Owner is to identify the entity with authority and responsibility for coordination of the activities of the various contractors, the limitations of their authority, and the work to be coordinated prior to the start of other work at or adjacent to the Site.

8.03 Legal Relationships

- A. Contractor may be entitled to a change in Contract Price or Contract Times if, while performing other work at or adjacent to the Site for Owner, the OPT, other contractor, or utility owner:
 - 1. Damages the Work or property of Contractor's Team;
 - 2. Delays, disrupts, or interferes with the execution of the Work; or
 - 3. Increases the scope or cost of performing the Work through their actions or inaction.
- B. Notify Construction Manager immediately of the event leading to a potential Change Proposal so corrective or mitigating action can be taken. Submit the Change Proposal within 30 days of the event if corrective action has not adequately mitigated the impact of the actions or inactions of others. Information regarding this other work in the Contract Documents is used to determine if Contractor is entitled to a change in Contract Price or Contract Times. Changes in Contract Price require that Contractor assign rights against the other contractor or utility owner to Owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Changes in Contract Times require that the time extension is essential to Contractor's ability to complete the Work within the Contract Times.
- C. Take prompt corrective action if Contractor's Team damages, delays, disrupts, or interferes with the work of Owner's employees, other contractors, or utility owners performing other work at or adjacent to the Site or agree to compensate other contractors or utility owners for correcting the damage. Promptly attempt to settle claims with other contractors or utility owners if Contractor damages, delays, disrupts, or interferes with the work of other contractors or utility owners performing other work at or adjacent to the Site.
- D. Owner may impose a Set-off against payments due to Contractor and assign the Owner's contractual rights against Contractor with respect to the breach of the obligations described in this Paragraph 8.03 to other contractors or utility owners if damages, delays, disruptions, or interference occur.
- E. **NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT OR THE CONTRACT DOCUMENTS AND TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD OWNER'S INDEMNITEES**

HARMLESS FROM AND AGAINST ALL CLAIMS AND INDEMNIFIED COSTS RESULTING FROM CONTRACTOR'S TEAM'S ACTION OR INACTION RELATED TO DAMAGES, DELAYS, DISRUPTIONS, OR INTERFERENCE WITH THE WORK OF OWNER'S EMPLOYEES, OTHER CONTRACTORS, OR UTILITY OWNERS PERFORMING OTHER WORK AT OR ADJACENT TO THE SITE.

ARTICLE 9 – OWNER'S AND OPT'S RESPONSIBILITIES

9.01 Communications to Contractor

- A. OPT issues communications to Contractor through Construction Manager except as otherwise provided in the Contract Documents.

9.02 Replacement of Owner's Project Team Members

- A. Owner may replace members of OPT at its discretion.

9.03 Furnish Data

- A. OPT is to furnish the data required of OPT under the Contract Documents.

9.04 Pay When Due

- A. Owner is to make payments to Contractor when due as described in Article 15.

9.05 Lands and Easements; Reports and Tests

- A. Owner's duties with respect to providing lands and easements are described in Paragraph 5.01. OPT will make copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site available to Contractor in accordance with Paragraph 5.03.

9.06 Insurance

- A. Owner's responsibilities with respect to purchasing and maintaining insurance are described in Article 6.

9.07 Modifications

- A. Owner's responsibilities with respect to Modifications are described in Article 11.

9.08 Inspections, Tests, and Approvals

- A. OPT's responsibility with respect to certain inspections, tests, and approvals are described in Paragraph 14.02.

9.09 Limitations on OPT's Responsibilities

- A. OPT does not supervise, direct, or have control or authority over, and is not responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or related safety precautions and programs, or for failure of Contractor to comply with Laws

and Regulations applicable to the performance of the Work. OPT is not responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

- B. OPT is not responsible for the acts or omissions of Contractor's Team. No actions or failure to act, or decisions made in good faith to exercise or not exercise the authority or responsibility available under the Contract Documents creates a duty in contract, tort, or otherwise of OPT to the Contractor or members of Contractor's Team.

9.10 Undisclosed Hazardous Environmental Condition

- A. OPT's responsibility for undisclosed Hazardous Environmental Conditions is described in Paragraph 5.06.

9.11 Compliance with Safety Program

- A. Contractor is to inform OPT of its safety programs and OPT is to comply with the specific applicable requirements of this program.

ARTICLE 10 – DESIGN PROFESSIONAL'S AND CONSTRUCTION MANAGER'S STATUS DURING CONSTRUCTION

10.01 Owner's Representative

- A. Construction Manager is Owner's representative. The duties and responsibilities and the limitations of authority of Construction Manager as Owner's representative are described in the Contract Documents.

10.02 Visits to Site

- A. Design Professional is to make periodic visits to the Site to observe the progress and quality of the Work. Design Professional is to determine, in general, if the Work is proceeding in accordance with the Contract Documents based on observations made during these visits. Design Professional is not required to make exhaustive or continuous inspections to check the quality or quantity of the Work. Design Professional is to inform OPT of issues or concerns and Construction Manager is to work with Contractor to address these issues or concerns. Design Professional's visits and observations are subject to the limitations on Design Professional's authority and responsibility described in the Contract Documents.
- B. Construction Manager is to observe the Work to check the quality and quantity of Work, implement Owner's quality assurance program and administer the Contract as Owner's representative as described in the Contract Documents. Construction Manager's visits and observations are subject to the limitations on Construction Manager's authority and responsibility described in the Contract Documents.

10.03 Rejecting Defective Work

- A. OPT has the authority to reject Work in accordance with Article 14. Construction Manager is to notify Contractor of Defective Work of which it is aware and document when Defective Work has been corrected or accepted in accordance with Article 14.

10.04 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. Construction Manager is to render decisions regarding non-technical or contractual/administrative requirements of the Contract Documents and will coordinate the response of OPT to Contractor.
- B. Design Professional is to render decisions regarding the conformance of the Work to the requirements of the Contract Documents. Design Professional will render a decision to either correct the Defective Work, or accept the Work under the provisions of Paragraph 14.04, if Work does not conform to the Contract Documents. Construction Manager will coordinate the response of OPT to Contractor.
- C. Construction Manager will issue a Request for a Change Proposal if a Modification is required. Construction Manager will provide documentation for changes related to the non-technical or contractual/administrative requirements of the Contract Documents. Design Professional will provide documentation if design related changes are required through Construction Manager.
- D. Contractor may appeal OPT's decision by submitting a Change Proposal if Contractor does not agree with the OPT's decision.

ARTICLE 11 – CHANGES TO THE CONTRACT

11.01 Amending and Supplementing the Contract Documents

- A. A Contract Amendment, Change Order, Work Change Directive, or Field Order may modify the Contract Documents. Modifications that include a change in the Contract Price or Contract Times can only be made in a Contract Amendment or Change Order.
- B. Changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other design or technical matters, must be supported by Design Professional's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of Design Professional.
- C. Proceed with the Changes in the Work or, in the case of a deletion in the Work, immediately cease construction activities related to the deleted Work upon receipt of the Modification.
- D. Contractor is not entitled to an increase in the Contract Price or an extension of the Contract Times with respect to Work performed that is not required by the Contract Documents, except in the case of an emergency as provided in Paragraph 7.12, or in the case of uncovering Work as provided in Paragraph 14.05. Contractor is responsible for costs and time delays associated with variations from the requirements of the Contract Documents unless the variations are specifically approved by Change Order.
- E. Acceptance of a Modification by Contractor constitutes agreement that the compensation provided by that Modification is the full, complete, and final compensation for all costs Contractor has or may incur because of or relating to this Modification whether these costs are known, unknown, foreseen, or unforeseen at this time, including any cost for delay, extended overhead, ripple or impact cost, or any other effect on changed or unchanged Work as a result of this Modification.

- F. Acceptance of a Modification by Contractor constitutes agreement that the changes in Contract Times are the complete and final adjustments for direct impacts to the ability of Contractor to complete the Work within the Contract Times and are the only adjustments to which Contractor is entitled.
- G. Perform added or revised Work under the applicable provisions of the Contract Documents for the same or similar Work unless different Drawings, Specifications, or directions are provided in the Modification.
- H. Nothing in this paragraph obligates Contractor to undertake Work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.02 Contract Amendments

- A. Owner and Contractor may modify the terms and conditions of the Contract Documents without the recommendation of Design Professional using a Contract Amendment.
- B. A Contract Amendment may also be used for authorizing a new task order for task order contracts or a new phase of the Work when using phased construction or purchasing Goods and Special Services to be incorporated into the Project. The Contract Amendment may be used to establish the Contract Price, Contract Times, or terms and conditions of the Contract for the new task order or phase of Work if not already established in the Contract Documents.

11.03 Change Orders

- A. All changes to the Contract Documents that include a change in the Contract Price or the Contract Times for previously authorized Work and changes to the Work requiring Design Professional's approval must be made by a Change Order. Change Orders prepared by Construction Manager may cover:
 1. Changes in Contract Price or Contract Times which are submitted by Contractor as a Change Proposal and agreed to by the parties;
 2. Changes in Contract Price or Contract Times to pay for undisputed Work performed in accordance with a Work Change Directive;
 3. Changes in Contract Price or Contract Times making final adjustments for Work covered under Alternates and Allowances;
 4. Changes in Contract Price or Contract Times making final adjustments to actual quantities for Unit Price Work;
 5. Changes in Contract Price resulting from an Owner Set-off, unless the set off has been successfully challenged by Contractor;
 6. Changes in Contract Price or Contract Times resulting from resolution of Claims;
 7. Changes in Contract Price or Contract Times required because of Owner's acceptance of Defective Work under Paragraph 14.04 or Owner's correction of Defective Work under Paragraph 14.07; or
 8. Other similar provisions that will modify the Contract Price or Contract Times.

- B. A Change Order may also be used to establish modifications of the Contract Documents that do not affect the Contract Price or Contract Times.

11.04 Work Change Directives

- A. A Work Change Directive does not change the Contract Price or the Contract Times, but is evidence that the parties expect that the modifications ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations on the Contract Price and Contract Times.
- B. Contractor must submit a Change Proposal seeking an adjustment of the Contract Price or the Contract Times no later than 30 days after the completion of the Work set out in the Work Change Directive if negotiations are unsuccessful under the terms of the Contract Documents governing adjustments.

11.05 Field Orders

- A. Design Professional may require minor changes in the Work that do not change the Contract Price or Contract Times using a Field Order through Construction Manager. Construction Manager may issue a Field Order for non-technical, administrative issues. Submit a Change Proposal if Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times before proceeding with the Work described in the Field Order.

11.06 Change Proposals

- A. Submit a Change Proposal to Construction Manager to:
 - 1. Request an adjustment in the Contract Price or Contract Times;
 - 2. Contest an initial decision by OPT concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents;
 - 3. Contest a Set-off against payment due; or
 - 4. Seek other relief under the Contract Documents.
- B. Notify Construction Manager immediately if a Change Proposal is to be submitted. Submit each Change Proposal to Construction Manager no later than 30 days after the event initiating the Change Proposal. Submit the following as part of the Change Proposal:
 - 1. Any proposed change in Contract Price, Contract Times, or other relief, accompanied by a statement that the requested Change Order is the entire adjustment to which Contractor believes it is entitled;
 - 2. The reason for the proposed change; and
 - 3. Supporting data, accompanied by a statement that the supporting data is accurate and complete.
- C. Construction Manager is to advise OPT regarding the Change Proposal. OPT is to review each Change Proposal and Contractor's supporting data, and within 30 days after receipt of the documents, direct Construction Manager to either approve or deny the Change Proposal in whole or in part. Construction Manager is to issue a Change Order for an approved Change Proposal. Change Proposals are denied if Construction Manager does not

act on the Change Proposal within 30 days. Contractor may start the time for appeal of the denial under Article 12.

11.07 Change of Contract Price; Contract Times

- A. Change Proposals for an adjustment in the Contract Price must comply with the provisions of this Paragraph 11.07. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12. Any adjustment of the Contract Times is subject to the limitations described in Paragraph 4.03.
- B. An adjustment in the Contract Price is to be determined as follows:
 - 1. By applying unit prices to the quantities of the items involved, subject to the provisions of Paragraph 13.03, where the Work involved is covered by unit prices in the Contract Documents;
 - 2. By a mutually agreed lump sum where the Work involved is not covered by unit prices in the Contract Documents; or
 - 3. Payment based on the Cost of the Work determined as provided in Article 13 when the Work involved is not covered by unit prices in the Contract Documents or the parties do not reach a mutual agreement to a lump sum.
- C. The original Contract Price may not be increased by more than 25 percent unless further limited by Laws and Regulations. Owner may decrease the Work by up to 25 percent of the Contract Price without adjusting Contractor's fee.

11.08 Execution of Change Orders and Contract Amendments

- A. Each Change Order or Contract Amendment must be specific and final as to changes in Contract Price and Contract Times for the changes described in the Change Order or Contract Amendment. Acceptance of a Change Order or Contract Amendment by Contractor constitutes a full accord and satisfaction for all claims and costs of any kind, whether direct or indirect, including impact, delay, or acceleration damages related to the Change Order or Contract Amendment. The execution of a Change Order or Contract Amendment by Contractor constitutes conclusive evidence of Contractor's agreement to the ordered changes in the Work, with no reservations or other provisions allowing for future changes in the Contract Price or Contract Times. This Contract, as amended, forever releases any claim against Owner for additional time or compensation for matters relating to or arising out of or resulting from the Work included within or affected by the executed Change Order or Contract Amendment. This release applies to claims related to the cumulative impact of all Change Orders or Contract Amendment and to any claim related to the effect of a change on unchanged Work.
- B. A Change Order or Contract Amendment is deemed to be in full force as if executed by Contractor if Contractor refuses to execute a Change Order or Contract Amendment that is required to be executed under the terms of this Paragraph 11.08.

11.09 Notice to Surety

- A. Notify the surety of Modifications affecting the general scope of the Work, changes in the provisions of the Contract Documents, or changes in Contract Price or Contract Times. Adjust the amount of each bond when Modifications change the Contract Price.

ARTICLE 12 – CLAIMS

12.01 Claims

- A. Follow the Claims process described in this Article for a demand or assertion by Contractor:
 - 1. Contesting an initial decision by OPT concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents;
 - 2. Contesting OPT's decision regarding a Change Proposal;
 - 3. Seeking resolution of a contractual issue that OPT has declined to address;
 - 4. Seeking other relief with respect to the terms of the Contract; or
 - 5. Any issue, request, demand, or dispute arising after Construction Manager's recommendation of Final Payment not specifically listed in the Certificate of Final Completion.
- B. Notify Construction Manager no later than 7 days after the start of the event giving rise to the Claim or, in the case of appeals regarding Change Proposals, within 7 days of the decision under appeal. The responsibility to substantiate a Claim rests with the entity making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Price or Contract Times, Contractor must certify that the Claim is made in good faith, that the supporting data is accurate and complete, and that to the best of Contractor's knowledge and belief, the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. The entity receiving a Claim is to review the Claim and consider its merits. The Owner and Contractor are to seek to resolve the Claim through the exchange of information and direct negotiations. The Owner and Contractor may extend the time for resolving the Claim by mutual agreement. Notify Construction Manager of actions taken on a Claim.
- D. Owner and Contractor may mutually agree to mediate the underlying dispute at anytime after initiation of a Claim.
 - 1. The agreement to mediate suspends the Claims process.
 - 2. Owner or Contractor may unilaterally terminate the mediation process after 60 days from the agreement to mediate and resume the Claims process as of the date of the termination. The Claim process resumes as of the date of the conclusion of the mediation, as determined by the mediator, if the mediation is unsuccessful in resolving the dispute.
 - 3. Owner and Contractor are to each pay one-half of the mediator's fees and costs.
- E. If the entity receiving a Claim approves the Claim in part or denies it in part, this action is final and binding unless the other entity invokes the procedure described in Article 17 for final resolution of disputes within 30 days of this action.

- F. Notify Construction Manager if efforts to resolve the Claim are not successful and the Claim is denied. A denial of the Claim is final and binding unless the other entity invokes the procedure described in Article 17 for the final resolution of disputes within 30 days of the denial.
- G. The results of the agreement or action on the Claim is to be incorporated in a Change Order by Construction Manager to the extent they affect the Contract Documents, the Contract Price, or the Contract Times if the Owner and Contractor reach an agreement regarding a Claim.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. The Cost of the Work is the sum of costs described in this Paragraph 13.01, except those excluded in Paragraph 13.01.D, necessary for the proper performance of the Work. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price under cost-plus, time-and-materials, or other cost-based terms; or
 - 2. To determine the value of a Change Order, Change Proposal, Claim, Set-off, or other adjustment in Contract Price.
- B. Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the events giving rise to the adjustment when the value of the adjustment is determined on the basis of the Cost of the Work.
- C. Costs included in the Cost of the Work may not exceed the costs commonly incurred in the proximate area of the Site for similar work unless agreed to by Owner. Cost of the Work includes only the following items:
 - 1. Payroll costs for Contractor's employees performing the Work, including one foreman per crew, and other required and agreed upon personnel for the time they are employed on the Work. Employees are to be paid according to wage rates for job classifications as agreed to by Owner in advance of the Work. Rates paid for this Work are to be the same as paid for Contract Work as established by certified payroll. Payroll costs may include:
 - a. Actual costs paid for salaries and wages;
 - b. Actual cost paid for fringe benefits, which consists of:
 - 1) Social security contributions,
 - 2) Unemployment,
 - 3) Excise and payroll taxes,
 - 4) Workers' compensation,
 - 5) Health and retirement benefits, and
 - 6) Paid time off for sick leave, vacations and holidays; and

- c. Actual cost of additional compensation paid for performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, to the extent authorized by Owner.
- 2. Cost of materials and equipment furnished and incorporated in the Work, including transportation and storage costs and required Suppliers' field services. Contractor may retain cash discounts unless Owner provided funds to Contractor for early payment of these materials and equipment. Cash discounts are to be credited to Owner if Owner provides funds for early payment. Make provisions for trade discounts, rebates, refunds, and returns from sale of surplus materials and equipment and reduce the Cost of the Work by these amounts.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. Obtain competitive bids from Subcontractors acceptable to Owner if required by OPT. Bids are to be opened in the presence of Construction Manager and other designated members for OPT. Provide copies of bids to Construction Manager to use in determining, with OPT, which bids are acceptable. The Subcontractor's Cost of the Work and fee are determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01 if the subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee.
- 4. Supplemental costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work;
 - b. Costs of materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site including transportation and maintenance costs related specifically to the Work;
 - c. Costs of engineers, architects, testing laboratories, surveyors, employed or retained for services specifically related to the Work.
 - d. Actual cost for construction equipment, including the costs of transporting, loading, unloading, assembling, dismantling, and removing construction equipment, whether owned by Contractor or rented from others.
 - 1) Cost for construction equipment must not exceed the cost shown in the most current edition of the rental rate book named in the Supplemental Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 2) With respect to Work that is the result of a Change Order, Change Proposal, Claim, Set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

- e. Applicable sales, consumer, use, and other similar taxes related to the Work for which Owner is not exempt, and which Contractor pays consistent with Laws and Regulations;
 - f. Deposits lost for causes other than negligence of Contractor's Team;
 - g. Royalty payments and fees for permits and licenses;
 - h. Cost of additional utilities, fuel, and sanitary facilities at the Site;
 - i. Minor expense items directly required by the Work; and
 - j. Premiums for bonds and insurance required by the Contract Documents.
- D. The Cost of the Work does not include the following administrative costs which are to be covered by the Contractor's fee:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, safety managers, superintendents, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office, for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.C.1.
 - 2. The cost of purchasing, renting or furnishing any tool or equipment whose current price would be less than \$500 if purchased new at retail.
 - 3. Office expenses other than Contractor's office at the Site.
 - 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 5. Costs due to the actions of Contractor's Team for the correction of Defective Work, disposal of materials or equipment that do not comply with Specifications, and correcting damage to property.
 - 6. Losses, damages, and related expenses caused by damage to the Work or sustained by Contractor in connection with the performance of the Work. Contractor is entitled to recover costs if covered by Owner's insurance, if applicable. Such losses may include settlements made with the approval of Owner. Do not include these losses, damages, and expenses in the Cost of the Work when determining Contractor's fee.
 - 7. Expenses incurred in preparing and advancing Claims.
 - 8. Any Indemnified Cost paid with regard to Contractor's indemnification of Owner's Indemnitees.
 - 9. Other overhead or general expense costs and the costs of items not described in Paragraph 13.01.C.
- E. Contractor's fee is determined in accordance with the Agreement when the Work is performed on a cost-plus basis.

- F. Contractor's Fee is determined as follows for Work included in a Change Proposal.
 - 1. Contractor's fee is 15 percent of the costs included in the Cost of the Work per Paragraph 13.01.C.1 for payroll cost and per Paragraph 13.01.C.2 for cost of materials and equipment furnished and incorporated in the Work.
 - 2. Contractor's fee is 5 percent of costs included in the Cost of the Work paid by Contractor for Work performed by Subcontractors per Paragraph 13.01.C.3.
 - 3. No fee will be payable for costs included in the Cost of the Work for supplemental costs per Paragraph 13.01.C.4.
 - 4. Fees are to be determined as follows where one or more tiers of Subcontracts are used:
 - a. The Subcontractor's fee is 15 percent for costs incurred under Paragraphs 13.01.C (excluding Paragraph 13.01.C.3) for the Subcontractor that performs the Work;
 - b. The Contractor and Subcontractors of a tier higher than that of the Subcontractor that performs the Work are allowed a fee of 5 percent of the total costs incurred by the next lower tier Subcontractor; and
 - c. Regardless of the number of subcontractor tiers involved, the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that performs the Work.
- G. When a Change Proposal includes additions and credits, the Contractor's fee will be calculated on the sum of costs for each cost category in Paragraph 13.01.C. and applying the appropriate fee from Paragraph 13.01.E. The amount to be credited by Contractor to Owner for any Change Proposal which results in a net decrease in the Cost of Work will be the amount of the actual net decrease in the Cost of Work plus an additional amount equal to 5 percent of the actual net decrease in the Cost of Work.
- H. Establish and maintain records in accordance with generally accepted accounting practices and submit these records, including an itemized cost breakdown together with supporting data, in a form and at intervals acceptable to Construction Manager whenever the Cost of the Work is to be determined pursuant to this Paragraph 13.01.

13.02 Allowances

- A. Include allowances specified in the Contract Documents in the Contract Price and provide Work covered by the allowance as authorized by Owner through Construction Manager.
- B. Contractor agrees that:
 - 1. The cash allowance is used to compensate Contractor for the cost of furnishing materials and equipment for the Work covered by the allowance item in the Contract Documents. Cost may include applicable taxes. Make provisions for trade discounts, rebates, and refunds and reduce the allowance costs by these amounts.
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances; and

3. Costs for cash allowances and installation costs as described in Paragraphs 13.02.B.1 and 13.02.B.2 above are included in the Contract Price.
- C. Construction Manager will issue a Change Order to adjust the Contract Price by the difference between the allowance amount and the actual amount paid by Contractor for Work covered by the allowance. The Change Order will be issued at the time costs are incurred by Contractor for Work covered by the allowance and this Work is included on the Application for Payment.

13.03 Unit Price Work

- A. The initial Contract Price for Unit Price Work is equal to the sum of the unit price line items in the Agreement. Each unit price line item amount is equal to the product of the unit price for each line item times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparing offers and determining an initial Contract Price. Payments to Contractor for Unit Price Work are to be based on actual quantities measured for Work in place.
- C. Each unit price is deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Construction Manager is to determine the actual quantities and classifications of Unit Price Work performed by Contractor to be incorporated into each Application for Payment. Construction Manager's decision on actual quantities is final and binding, subject to the provisions of Paragraph 13.03.E.
- E. Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price within 30 days of Construction Manager's decision under Paragraph 13.03.D, if:
 1. The total cost of a particular item of Unit Price Work amounts to 20 percent or more of the total Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 20 percent from the estimated quantity of an item indicated in the Agreement;
 2. There is no corresponding adjustment with respect to other items of Work; and
 3. Contractor believes it has incurred additional expense as a result of this condition or if Owner believes that the quantity variation entitles Owner to an adjustment in the Contract Price.
- F. Construction Manager will issue a Change Order adjusting estimated quantities to actual quantities to determine the final Contract Price.

13.04 Contingencies

- A. Contingency funds may be included in the Contract Price to pay for Work not defined specifically by the Contract Documents that is essential to the completion of the Project. Contingency funds will be as described in the Agreement.

- B. The contingency funds may be used for costs incurred by Contractor, provided these costs are approved by Owner. Costs are to be determined and documented in accordance with Paragraph 13.01. The contingency funds are not to be used for the following items:
 - 1. Cost overruns due to changes in material costs after the Contract Price is established, unless specific price escalation provisions are made in the Agreement;
 - 2. Rework required to correct Defective Work;
 - 3. Inefficiencies in completing the Work due to Contractor's selected means, methods, sequences, or procedures of construction;
 - 4. Work Contractor failed to include in the Contract Price;
 - 5. Changes required by changes in Laws and Regulations enacted after the Contract Price is established; or
 - 6. Any Work that does not constitute a change in Scope in the Work included in the Contract Price.
- C. Construction Manager is to issue a Change Order for approved expenditures from contingency funds. When the Change Order is issued, the costs are to be added to the Application for Payment. Contractor is to maintain a tabulation showing the contingency amount, adjustments to the contingency amount, and amounts remaining as the Project progresses.
- D. Any contingency amounts that are not included in a Change Order are retained by Owner. A Change Order will be issued to deduct unused contingency amounts from the Contract Price prior to Final Payment.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Provide safe access to the Site and the Work for the observation, inspection, and testing of the Work in progress. Contractor can require compliance with Contractor's safety procedures and programs as part of providing safe access.

14.02 Tests, Inspections, and Approvals

- A. OPT may retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform inspections. Cooperate with inspection and testing personnel and assist with providing access for required inspections, tests, and handling test specimens or Samples.
- B. Arrange for and facilitate inspections, tests, and approvals required by Laws or Regulations of governmental entities having jurisdiction that require Work to be inspected, tested, or approved by an employee or other representative of that entity. Pay associated costs and furnish Construction Manager with the required certificates of inspection or approval.
- C. Arrange, obtain, and pay for inspections and tests required:
 - 1. By the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to OPT;

2. To attain OPT's acceptance of materials or equipment to be incorporated in the Work;
 3. By manufacturers of equipment furnished under the Contract Documents;
 4. For testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work;
 5. For acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work;
 6. For re-inspecting or retesting Defective Work, including any associated costs incurred by the testing laboratory for cancelled tests or standby time; and
 7. For retesting due to failed tests.
- D. Provide independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to OPT to provide these inspections and tests.

14.03 Defective Work

- A. It is Contractor's obligation to ensure that the Work is not Defective.
- B. OPT has the authority to determine whether Work is Defective and to reject Defective Work.
- C. Construction Manager is to notify Contractor of Defective Work of which OPT has actual knowledge.
- D. Promptly correct Defective Work.
- E. Take no action that would void or otherwise impair Owner's special warranties or guarantees when correcting Defective Work.
- F. Pay claims, costs, losses, and damages arising out of or relating to Defective Work, including:
 1. Costs for correction, removal, and replacement of Defective Work;
 2. Cost of the inspection and testing related to correction of Defective Work;
 3. Costs for Design Professional's fees associated with review and approval of design modifications for correction, removal, and replacement of Defective Work.
 4. Fines levied against Owner by governmental authorities because of Defective Work; and
 5. Costs of repair or replacement of work of others resulting from Defective Work.

14.04 Acceptance of Defective Work

- A. Owner may elect to accept Defective Work instead of requiring correction or removal and replacement of Defective Work provided:
 1. This acceptance occurs prior to final payment;
 2. Design Professional confirms that the Defective Work is in general accordance with the design intent and applicable design principles; and

3. Design Professional confirms that acceptance of the Defective Work does not endanger public health or safety.
- B. Owner may impose a reasonable Set-off against payments due under Article 15 for costs associated with OPT's evaluation of Defective Work to determine if it can be accepted and to determine the diminished value of the Work. Owner may impose a reasonable Set-off against payments due under Article 15 if the parties are unable to agree as to the decrease in the Contract Price to compensate Owner for the diminished value of Defective Work accepted. Construction Manager is to issue a Change Order for acceptance of the Defective Work prior to final payment. Pay an appropriate amount to Owner if the acceptance of Defective Work occurs after final payment.

14.05 Uncovering Work

- A. OPT has the authority to require inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. Work that is covered prior to approval of Construction Manager must be uncovered for OPT's observation if requested by Construction Manager. Pay for uncovering Work and its subsequent restoration unless Contractor has given Construction Manager timely notice of Contractor's intention to cover the Work and Construction Manager fails to act with reasonable promptness in response to this notice.
- C. Provide necessary labor, material, and equipment and uncover, expose, or otherwise make available the portion of the Work suspected of being Defective for observation, inspection, or testing if OPT considers it necessary or advisable that covered Work be observed by Design Professional or inspected or tested by others as directed by Construction Manager.
 1. Pay for claims, costs, losses, and damages associated with uncovering, exposing, observing, inspecting, and testing if it is found that the uncovered Work is Defective. Pay costs for correction of Defective Work. Pay for reconstruction, repair, or replacement of work of others if it is found that the uncovered Work is Defective.
 2. Submit a Change Proposal for an increase in the Contract Price or an extension of the Contract Times directly attributable to this uncovering, exposure, observation, inspection, testing, and reconstruction if the uncovered Work is found to not be Defective.

14.06 Owner May Stop the Work

- A. Owner may order Contractor to stop the Work if:
 1. The Work is Defective;
 2. Contractor fails to supply sufficient skilled workers or suitable materials or equipment;
 - or
 3. Contractor performs Work that may fail to conform to the Contract Documents when completed.
- B. This stop work order is to remain in effect until the reason for the stop work order has been eliminated. Owner's right to stop the Work does not create a duty to exercise this right for the benefit of Contractor's Team or surety.

14.07 Owner May Correct Defective Work

- A. Owner may remedy Defective Work after 7 days' notice to Contractor if Contractor fails to correct Defective Work, or to remove and replace Defective Work as required by OPT;
- B. Owner may:
 - 1. Exclude Contractor from the Site;
 - 2. Take possession of the Work and suspend Contractor's services related to the Work; and
 - 3. Incorporate stored materials and equipment in the Work.
- C. Allow OPT access to the Site and off-site storage areas to enable Owner to exercise the rights and remedies under this paragraph.
- D. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 are to be charged against Contractor as a Set-off against payments due under Article 15. These claims, costs, losses, and damages include costs of repair and the cost of replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's Defective Work.
- E. Contractor is not allowed an extension of the Contract Times because of delays in the performance of the Work attributable to the exercise of the Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; FINAL COMPLETION

15.01 Progress Payments

- A. Progress payments are to be submitted to Construction Manager on the Application for Payment form provided by Construction Manager following procedures in the Contract Documents.
 - 1. Progress payments for lump sum Work are to be paid based on the earned value to date at the amounts shown in the Schedule of Values submitted as required by Paragraph 2.03. Final payment will be for the total lump sum amount.
 - 2. Progress payments for Unit Price Work are based on the number of units completed as determined under the provisions of Paragraph 13.03.
 - 3. Progress payments for Work to be paid based on the Cost of the Work per Article 13 are to be paid for Work completed by Contractor during the pay period.
- B. Reduction in Payment by Owner:
 - 1. Owner is entitled to impose a Set-off against payment based on the following:
 - a. Claims made against Owner or costs, losses, or damages incurred by Owner related to:
 - 1) Contractor's conduct in the performance of the Work, including workplace injuries, non-compliance with Laws and Regulations, or patent infringement; or

- 2) Contractor's failure to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site, including workplace injuries, property damage, and non-compliance with Laws and Regulations.
- b. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
- c. Work is Defective, or completed Work has been damaged by Contractor's Team, requiring correction or replacement;
- d. Owner has been required to correct Defective Work or complete Work in accordance with Paragraph 14.07;
- e. The Contract Price has been reduced by Change Orders;
- f. Events have occurred that would constitute a default by Contractor justifying a termination for cause;
- g. Liquidated or other damages have accrued because of Contractor's failure to achieve Milestones, Substantial Completion, or completion of the Work;
- h. Liens have been filed regarding the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of these Liens;
- i. Owner has been notified of failure to make payments to Subcontractors, Suppliers, or Employees;
- j. Failure to submit up-to-date record documents as required by the Contract Documents;
- k. Failure to submit monthly Progress Schedule updates or revised schedules as requested by Construction Manager;
- l. Failure to provide Project photographs required by the Contract Documents;
- m. Failure to provide Certified Payroll required by the Contract Documents;
- n. Compensation for OPT for overtime charges of Construction Manager, third review of Shop Drawings, review of substitutions, re-inspection fees, inspections or designs related to correction of Defective Work, or other services identified as requiring payment by Contractor;
- o. Costs for tests performed by Owner to verify that Work previously tested and found to be Defective has been corrected;
- p. OPT has actual knowledge of the occurrence of events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents with associated cost impacts;
- q. Payment would result in an over-payment of the Contract Price; or
- r. Other items entitling Owner to a Set-off against the amount recommended.
2. Compensation for services of OPT staff is to be at the rates established in the Supplementary Conditions.

3. Construction Manager is to notify Contractor stating the amount and the reasons for an imposed Set-off. Owner is to pay Contractor amounts remaining after deduction of the Set-off. Owner is to pay the Set-off amount agreed to by Owner and Contractor if Contractor remedies the reasons for the Set-off. Contractor may submit a Change Proposal contesting the Set-off.
- C. No payment will be made for Work authorized by a Work Change Directive until the Work Change Directive is incorporated into a Change Order, unless arrangements or interim payments have been included in the Work Change Directive. Payment can be included in an Application for Payment when the Change Order is approved.
- D. Owner is to pay the amount of payment recommended by Construction Manager within 30 days after receipt of the Application for Payment and accompanying documentation from Construction Manager.
- E. Contractor certifies that all Work, including materials, covered by each Application for Payment have been completed or delivered and stored in accordance with the Contract Documents, that all amounts have been paid for Work, materials, and equipment for which previous payment has been made by Owner, and that the current payment amount shown in this Application for Payment is due.

15.02 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to the Work, materials, and equipment furnished under the Contract is to pass to Owner free and clear of Liens, title defects, and patent, licensing, copyright, or royalty obligations no later than 7 days after the time of payment by Owner of the Application for Payment which includes these items.

15.03 Substantial Completion

- A. Notify Construction Manager when the Work or portion of the Work to be accepted under Paragraph 15.04 is substantially complete and request a Certificate of Substantial Completion.
- B. OPT is to inspect the Work after Contractor's notification to determine if the Work is substantially complete. Construction Manager is to either issue the Certificate of Substantial Completion which sets the date of Substantial Completion or notify Contractor of the reasons the Project is not considered to be substantially complete.
- C. The OPT and Contractor are to meet to discuss Owner's use or occupancy of the Work following Substantial Completion. Items to be discussed at this meeting include:
 1. Review of insurance policies with respect to the end of the Contractor's coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner;
 2. Owner's assumption of responsibility for security, operation, protection of the Work, maintenance, and utilities upon Owner's use or occupancy of the Work;
 3. Contractor's obligations for operations and maintenance during performance and acceptance testing;
 4. Contractor's access to the Site to complete punch list items; and

5. Procedures for correction of Defective Work during the one-year correction period.

15.04 Partial Utilization

- A. Owner may use or occupy substantially completed parts of the Work which are specifically identified in the Contract Documents, or which OPT and Contractor agree constitutes a separately functioning and usable part of the Work prior to Substantial Completion of the Work. Owner must be able to use that part of the Work for its intended purpose without significant interference with Contractor's performance of the remainder of the Work. Contractor and OPT are to follow the procedures of Paragraph 15.03 for this part of the Work.
- B. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Article 6.

15.05 Final Inspection

- A. OPT is to make a final inspection upon notice from Contractor that the entire Work or portion to be accepted under Paragraph 15.04 is complete. Construction Manager is to notify Contractor of Work determined to be incomplete or Defective. Immediately take corrective measures to complete the Work and correct Defective Work.
- B. Notify Construction Manager when the entire Project is ready for Final Payment under Paragraph 15.06 and request a Certificate of Final Completion.
- C. OPT is to inspect the Work after Contractor's notification to determine if the Project is complete. Construction Manager is to either issue the Certificate of Final Completion which sets the date of Final Completion or notify Contractor of the reasons the Project is not considered to be complete.

15.06 Final Payment

- A. Make application for final payment after completing required corrections identified during the final inspection and delivering items and documents required by the Contract Documents. Provide the following with the final Application for Payment:
 1. Consent of Surety to Final Payment acknowledging unsettled disputes; or
 2. Affidavit of Payment of Debts and Claims or Affidavit of Release of Liens or furnish receipts or releases from Subcontractors and Suppliers when a payment bond is not required.
- B. Construction Manager is to either recommend payment of the final Application for Payment to Owner if OPT is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled or notify Contractor of OPT's reasons for not recommending final payment.
- C. The Work is complete, subject to surviving obligations, when it is ready for final payment as established by the Construction Manager's recommendation of payment of the final Application for Payment to Owner and the issuance of a Certificate of Final Completion.
- D. Owner is to pay the amount of final payment recommended by Construction Manager within 30 days after receipt of the final Application for Payment and accompanying

documentation from Construction Manager; unless additional time is required for approval of a governing board or entity. Payment will be within 30 days of approval by the governing board or entity.

15.07 Waiver of Claims

- A. The making of final payment does not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from:
 - 1. Unsettled Liens or claims for non-payment;
 - 2. Defective Work appearing after final inspection pursuant to Paragraph 15.05;
 - 3. Contractor's failure to comply with the terms of special guarantees specified in the Contract Documents;
 - 4. Outstanding Claims or express reservation of rights by Owner; or
 - 5. Contractor's continuing obligations under the Contract Documents.
- B. Contractor waives claims and rights against Owner by accepting final payment except for those Claims made in accordance with the provisions of Article 17 and specifically noted in the Certificate of Final Completion.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

- A. Owner may suspend the Work or a portion of the Work for a period of not more than 90 consecutive days, at any time and without cause, by notice to Contractor. This notice fixes the date on which Contractor is to resume Work. Contractor is entitled to adjustments in the Contract Price and Contract Times directly attributable to this suspension. Submit a Change Proposal seeking an adjustment no later than 30 days after the date fixed for resumption of Work.

16.02 Owner May Terminate for Cause

- A. The occurrence of one or more of the following events constitutes a default by Contractor and justifies termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents, including failure to supply sufficient skilled workers or suitable materials or equipment;
 - 2. Failure to adhere to the Progress Schedule;
 - 3. Failure of Contractor to provide a satisfactory replacement bond or insurance in the event either is lost or canceled;
 - 4. Failure of Contractor to maintain financial solvency to adequately complete the Project as indicated by one or more of the following:
 - a. A petition of bankruptcy is filed by or against Contractor;
 - b. Contractor is adjudged as bankrupt or insolvent;

- c. Contractor or surety makes a general assignment for the benefit of creditors;
 - d. A receiver is appointed for the benefit of Contractor's creditors; or
 - e. A receiver is appointed because Contractor's insolvency;
- 5. Contractor's disregard of Laws or Regulations of public bodies having jurisdiction; or
- 6. Contractor's repeated disregard of the authority of OPT.
- B. Contractor and surety must provide adequate assurance of future performance in accordance with the Contract Documents that is satisfactory to Owner if Contractor is believed to be in financial distress due to the existence of one or more of the indicators listed in Paragraph 16.02.A.4. Owner may terminate this Contract if Contractor and surety fail to provide adequate documentation satisfactory to Owner within 10 days of Construction Manager's request for this information.
- C. Owner may declare Contractor to be in default, give notice to Contractor and surety that the Contract is terminated, and enforce the rights available to Owner under the performance bond after giving Contractor and surety 10 days' notice that one or more of the events identified in Paragraph 16.02.A has occurred.
- D. Owner may exclude Contractor from the Site, take possession of the Work, incorporate the materials and equipment stored and complete the Work as Owner may deem expedient if Owner has terminated the Contract for cause.
- E. Owner may elect not to proceed with termination of the Contract under this Paragraph 16.02 if Contractor begins to cure the cause for termination within 7 days of receipt of notice of intent to terminate.
- F. Contractor is not entitled to receive further payments until the Work is completed if Owner proceeds as provided in this Paragraph 16.02. The amount of the Contract Price remaining is to be paid to Contractor if the unpaid balance exceeds the cost to complete the Work. This cost to complete the Work may include related claims, costs, losses, damages, and the fees and charges of engineers, architects, attorneys, and other professionals retained by Owner. Pay the difference to Owner if the cost to complete the Work including related claims, costs, losses, and damages exceeds the unpaid balance of the Contract Price. Claims, costs, losses, and damages incurred by Owner are to be reviewed as to their reasonableness and incorporated in a Change Order by Construction Manager. Owner is not required to obtain the lowest price for the Work performed when exercising its rights or remedies under this paragraph.
- G. Termination does not affect the rights or remedies of Owner against Contractor or against surety under the payment bond or performance bond. Owner does not release Contractor from liability by paying or retaining money due Contractor.

16.03 Owner May Terminate for Convenience

- A. Owner may terminate the Contract without cause after giving 7 days' notice to Contractor of the effective date of termination. Contractor is to be paid for the following if Owner terminates for convenience:
 - 1. Work completed in accordance with the Contract Documents prior to the effective date of termination;

2. Actual costs sustained prior to the effective date of termination for Work in progress, plus a fair and reasonable amount for overhead and profit; fee calculated in accordance with Paragraph 13.01; and
 3. Reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor will not be paid for loss of anticipated profits or revenue, post termination overhead costs, or other economic loss arising out of or resulting from this termination.

16.04 Contractor May Stop Work or Terminate

- A. Contractor may terminate the Contract and issue a Change Proposal requesting payment from Owner on the same terms as provided in Paragraph 16.03 after 10 days' notice to Construction Manager provided that, through no act or fault of Contractor:
1. The Work is suspended for more than 90 consecutive days by Owner;
 2. Construction Manager fails to act on an Application for Payment within 30 days after it is submitted; or
 3. Owner fails to pay Contractor sums determined to be due, other than the final payment, within 30 days after payment is recommended by Construction Manager; and
 4. OPT does not remedy this suspension or failure within 10 days after receipt of the notice.
- B. Contractor may stop Work, without prejudice to other rights or remedies in lieu of terminating the Contract if Construction Manager has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed to pay Contractor within 30 days after payment is recommended by Construction Manager. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times for damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

- A. The Owner or Contractor may appeal a Claim, approved or denied in part or in full, by:
1. Electing to invoke the dispute resolution process if one is provided for in the Supplementary Conditions;
 2. Agreeing with the other party to submit the dispute to a dispute resolution process; or
 3. Notifying the other party of the intent to submit the dispute to a court of competent jurisdiction if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to.

ARTICLE 18 – MISCELLANEOUS

18.01 Computation of Times

- A. Exclude the first day and include the last day when determining dates for a period referred to in the Contract Documents by days. The last day of this period is to be omitted from the determination if it falls on a Saturday, Sunday, or a legal holiday.
- B. All references and conditions for a calendar day contract in the Contract Documents apply for a Fixed Date Contract. A fixed date contract is one in which the calendar dates for reaching Substantial Completion and/or Final Completion are specified in lieu of identifying the number of calendar days involved.

18.02 Independent Contractor

- A. Contractor is to perform its duties under this Contract as an independent contractor. Contractor's Team and their personnel are not considered to be employees or agents of Owner. Nothing in this Agreement is to be interpreted as granting Contractor's Team the right or authority to make commitments for Owner. This Agreement does not constitute or create a joint venture, partnership, or formal business organization of any kind.

18.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available to the Owner or Contractor by these General Conditions are in addition to, and are not a limitation of, the rights and remedies which are otherwise imposed or available by:
 - 1. Laws or Regulations,
 - 2. Special warranties or guarantees, or
 - 3. Other provisions of the Contract Documents.
- B. The provisions of this Paragraph 18.03 are as effective as if repeated specifically in the Contract Documents regarding each duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

- A. Owner's Indemnitees are not liable to Contractor for claims, costs, losses, or damages sustained by Contractor's Team associated with other projects or anticipated projects.

18.05 No Waiver

- A. The failure of Owner or Contractor to enforce any provision of this Contract does not constitute a waiver of that provision, affect the enforceability of that provision, or the enforceability of the remainder of this Contract.

18.06 Severability

- A. If a court of competent jurisdiction renders a part of this Contract invalid or unenforceable, that part is to be severed and the remainder of this Contract continues in full force.

18.07 Survival of Obligations

- A. Representations, indemnifications, warranties, guarantees, and continuing obligations required by the Contract Documents survive completion and acceptance of the Work or termination of the Contract.

18.08 No Third-Party Beneficiaries

- A. Nothing in this Contract can be construed to create rights in any entity other than the Owner and Contractor. Neither the Owner nor Contractor intends to create third party beneficiaries by entering into this Contract.

18.09 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents

18.10 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights or interests in the Contract will be binding on the other party without the written consent of the other party. Money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.11 No Waiver of Sovereign Immunity

- A. Owner has not waived its sovereign immunity by entering into and performing its obligations under this Contract.

18.12 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.
- B. Venue for legal proceedings lies exclusively in the county in which the Owner's home office is located unless specified elsewhere in the Contract Documents.

END OF SECTION

00 73 00 SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement Section 00 72 00 "General Conditions." The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below.

The paragraph numbers used in the Supplementary Conditions correspond to the General Condition paragraphs they modify with the prefix "SC" added—for example, "Paragraph SC-4.05." modifies General Conditions Paragraph 4.05.

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

SC-1.01 Defined Terms

- A. The Owner's Project Team as defined in the Paragraph 1.01.A.45 of the General Conditions consists of the following organizations:
 - 1. City of Shawnee
 - 2. Freese and Nichols, Inc

ARTICLE 2 – PRELIMINARY MATTERS

SC-2.02 Copies of Documents

- A. Delete Paragraph 2.02.A in its entirety and insert the following in its place:
 - "A. Owner will furnish 6 printed copies of the Contract Documents (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction."

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

SC-4.03 Delays in Contractor's Progress

- "1. Abnormal Weather Conditions:
 - a. If "abnormal weather conditions" are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.
 - b. Contractor shall anticipate the number of foreseeable bad weather days per month indicated in the table in Exhibit A.
 - c. If the Contractor is delayed at any time in the progress of the Work by adverse weather conditions not reasonably anticipatable, then the Contract Time shall be extended by Change Order for such reasonable time as the Engineer may determine.

- d. Any Claim for extension of time shall be made in writing to the Engineer not more than twenty (20) days after the commencement of the delay, otherwise it shall be waived. In the case of continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the Work.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

SC-13.01 Cost of the Work

- A. Supplement Paragraph 13.01.C.4.d.1) by adding the following sentence:
“The equipment rental rate book that governs the included costs for the rental of machinery and equipment owned by Contractor (or a related entity) under the Cost of the Work provisions of this Contract is the most current edition of Equipment Watch Cost Recovery Rental Rate Blue Book.”

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; FINAL COMPLETION

SC-15.01 Progress Payments

- A. Compensation for services of OPT staff as specified in Paragraph 15.01 will be at the following rates:

Position	Hourly Rate
Principal in Charge	\$350
Project Manager	\$300
Project Engineer	\$200
Design Engineer	\$200
Engineering Technician	\$150

- B. Expenses will be billed at the actual cost multiplied by 1.15.

SC-15.03 Substantial Completion

END OF SECTION

EXHIBIT A – FORESEEABLE BAD WEATHER DAYS

Month	Nominal Adverse Weather Days
January	8
February	7
March	5
April	3
May	3
June	3
July	2
August	2
September	2
October	3
November	4
December	7

END OF EXHIBIT A

00 73 16 INSURANCE REQUIREMENTS

ARTICLE 1 – GENERAL PROVISIONS

1.01 CONTRACTOR’S INSURANCE

- A. Obtain and maintain insurance that complies with this Section with coverage amounts equal to or greater than the amounts specified in Article 2 or greater where required by Laws and Regulations.
- B. Coverage is to remain in effect at least until the Work is complete and longer if expressly required elsewhere in this Contract, and when Contractor may be correcting, removing, or replacing Defective Work as a warranty or correction obligation, or returning to the Site to conduct other tasks arising from the Contract.
- C. Coverage is to apply with respect to the performance of the Work, whether performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- D. Obtain insurance from companies that are duly licensed or authorized in the state in which the Project is constructed to issue insurance policies for the required limits and coverages and that have an A.M. Best rating of A-VIII or better.
- E. Alternative forms of insurance coverage, including self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not acceptable to meet the insurance requirements of this Contract.
- F. Owner will not purchase or maintain insurance to protect the interest of Contractor, subcontractors, or others in the Work. Owner does not represent that the insurance coverage and limits established in this Contract are adequate to protect Contractor or the Contractor’s interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that it deems necessary and including the cost of this insurance in the offered Contract Price.
- G. Contractor is fully responsible for all losses arising out of, resulting from, or connected with operations under this Contract whether or not these losses are covered by insurance. The acceptance of evidence of insurance by OPT, or others listed as an additional insured, that does not comply with the Contract requirements does not release Contractor from the requirement to comply with Contract requirements.
- H. The required insurance and insurance limits do not limit the Contractor’s liability under the indemnities granted to Owner’s Indemnitees in the Contract Documents.
- I. Do not perform any Work on the Project unless the required insurance policies are in effect. Owner may exclude Contractor from the Site and exercise the Owner’s termination rights under the General Conditions if Contractor fails to obtain or maintain the required insurance.
- J. Policies must provide notice before cancellation, non-renewal, or any material change in the policy’s terms and conditions as described in Paragraph 1.04.D. Contractor is to notify Owner and the additional insured of any notice received within 3 days of receipt of a notice

by Contractor. Contractor is to cease all Work covered by cancelled or non-renewed insurance if suitable coverage is not in place in time to prevent a lapse in coverage. Contractor is solely responsible for any delays associated with lapsed coverage.

- K. Owner may elect, but is in no way obligated, to obtain equivalent insurance to protect the Owner's interests without prejudice to any other right or remedy if Contractor fails to obtain or maintain the required insurance. Owner may impose a reasonable Set-off against payments to recover the cost of the insurance.
- L. Owner's policies, if any, operate separately and independently from policies required to be provided by Contractor and Contractor cannot rely upon the Owner's policies to meet any of the Contractor's obligations to Owner, Design Professional, or any third party.

1.02 SUBCONTRACTOR OR SUPPLIER INSURANCE

- A. Require subcontractors to purchase and maintain workers' compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project. Include OPT as additional insureds on subcontractor policies in accordance with Paragraph 1.03.
- B. Require suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- C. Contractor is liable for all losses that would have been covered by subcontractor or supplier insurance if subcontractor or supplier fails to provide coverage.

1.03 ADDITIONAL INSURED

- A. The following are to be named as an additional insured on all insurance policies, except workers' compensation insurance, builder's risk insurance, and the Contractor's professional liability insurance:
 - 1. **City of Shawnee**
Attn: **Seth Barkhimer, Public Works**
111 S Kickapoo Ave
Shawnee, OK 74801
 - 2. **Freese and Nichols, Inc.**
Attn: **Jonathan Faughtenberry, PM**
5100 E Skelly Drive, Suite 602
Tulsa, OK, 74127
- B. All insurance related notices are to be sent to the addresses listed above.
- C. Notify Owner and each additional insured if Contractor fails to purchase or maintain the insurance required by the Contract Documents.
- D. All insurance policies must include a waiver of subrogation in favor of each additional insured.
- E. Provide for an endorsement that the "other insurance" clause will not apply to OPT where OPT is an additional insured. Contractor's insurance is primary and non-contributory with respect to any insurance or self-insurance carried by OPT for liability arising out of operations under this Contract.

1.04 EVIDENCE OF INSURANCE

- A. Deliver evidence of insurance, in accordance with this Section, to the Owner with the signed Contract Documents to demonstrate that Contractor has obtained the policies, coverages, and endorsements required by the Contract.
 - 1. Continue to provide evidence Contractor is maintaining the required insurance for the duration of the Contract Times and such extended periods as required by the Contract Documents.
 - 2. Provide this evidence of insurance to Owner and each additional insured.
 - 3. Contractor may block out (redact) any confidential premium or pricing information and wording specific to a project or jurisdiction in any policy or endorsement furnished under this paragraph not applicable to this Contract.
- B. OPT's failure to demand evidence of insurance or verify the Contractor's full compliance with insurance requirements or failure to identify a deficiency in compliance from the evidence provided is not a waiver of the Contractor's obligation to obtain and maintain the insurance required by the Contract Documents.
- C. Provide evidence of insurance acceptable to Owner with the executed Contract Documents. Provide the following as evidence of insurance:
 - 1. Copy of insurance policies;
 - 2. Certificates of insurance on an acceptable form;
 - 3. Full disclosure of exclusions;
 - 4. Declaration pages, riders, or endorsements to policies;
 - 5. Documentation of deductibles;
 - 6. List of named and additional insureds for each policy; and
 - 7. Evidence that waivers of subrogation are provided on applicable policies.
- D. Provide evidence of a requirement in the policy that at least 10 days' notice will be given before cancellation, non-renewal or any material change in the policy's terms and conditions including:
 - 1. Type of coverage provided;
 - 2. Riders or endorsements to policies;
 - 3. Policy limits of coverage;
 - 4. Change in deductible amount;
 - 5. Status of named or additional insured; or
 - 6. Waivers of subrogation.
- E. Certificates of Insurance:
 - 1. Submit certificates of insurance meeting the applicable requirements of the applicable state department of insurance. No requirement of this Contract may be interpreted as requiring the issuance of a certificate of insurance on a form that has not first been filed with and/or approved by the applicable state department of insurance.

2. Include the name of the Project in the description of operations box on the certificate of insurance, and the name of each additional insured.
- F. Continuing Evidence of Coverage:
1. Provide updated, revised, or new evidence of insurance prior to the expiration of existing policies. A certificate of insurance is acceptable as evidence of renewal of insurance policies, provided no changes are made in the policy originally provided with signed Contract Documents.
 2. Provide evidence of continuation of insurance coverage at final payment and for the following 3 years.

ARTICLE 2 – INSURANCE COVERAGE AMOUNTS AND POLICY REQUIREMENTS

2.01 CONTRACTOR’S INSURANCE

A. Workers’ Compensation and Employer’s Liability Insurance:

1. Purchase and maintain workers’ compensation and employer’s liability insurance, including, as applicable, United States Longshoreman and Harbor Workers’ Compensation Act, Jones Act, stop-gap employer’s liability coverage for monopolistic states, and foreign voluntary workers’ compensation, including off-site operations.
2. Provide the following coverage with not less than the minimum limits indicated:

Workers’ Compensation and Related Insurance	Policy Limits
Workers’ Compensation	
State	Statutory
Applicable Federal (e.g., Longshore)	Statutory
Foreign Voluntary Workers’ Compensation (Employer’s Responsibility Coverage), if Applicable	Statutory
Employers’ Liability	
Each Accident	\$500,000
Each Employee	\$500,000
Policy Limit	\$500,000

B. Commercial General Liability:

1. Purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
 - a. Damages because of bodily injury, sickness or disease, or death of any person other than Contractor’s employees;
 - b. Damages insured by reasonably available personal injury liability coverage; and
 - c. Damages because of injury to or destruction of tangible property wherever located, including loss of use resulting from the damage.
2. Contractor’s commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form).
 - a. Provide additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements

CG 20 10 10 01 and CG 20 37 10 01 (together). Equivalent endorsements may be used if Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available.

- b. Provide ISO Endorsement CG 20 32 07 04 “Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured” or its equivalent for Design Professional additional insured.
3. Provide the following coverages and endorsements:
 - a. Products and completed operations coverage.
 - 1) Maintain coverage for 3 years after final payment.
 - 2) Provide Owner and each other additional insured evidence of continuation of such insurance at final payment and for 3 years thereafter.
 - b. Blanket contractual liability coverage, including coverage of Contractor’s contractual indemnity obligations in the General Conditions.
 - c. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 - d. Underground, explosion, and collapse coverage.
 - e. Personal injury coverage.
4. The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
 - a. Modifications of the standard definition of “insured contract” (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 - b. Exclusion for water intrusion or water damage.
 - c. Provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 - d. Exclusion of coverage relating to earth subsidence or movement.
 - e. Exclusion for the insured’s vicarious liability, strict liability, or statutory liability (other than workers’ compensation).
 - f. Limitations or exclusions based on the nature of Contractor’s work.
 - g. Professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.
5. Provide the following coverage with not less than the minimum limits indicated:

Commercial General Liability Insurance	Policy Limits
General Aggregate	\$1,000,000/Occurrence \$2,000,000/Aggregate
Products - Completed Operations	\$1,000,000/Occurrence \$2,000,000/Aggregate
Personal and Advertising Injury (Limit Per Person)	\$1,000,000
Bodily Injury and Property Damage – Each Occurrence	\$1,000,000

C. Automobile Liability:

1. Purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis. Coverage can be provided through individual limits for bodily injury and for property damage or a combined single limit covering both bodily injury and property damage.
2. Provide the following coverage with not less than the minimum limits indicated:

Automobile Liability Insurance	Policy Limits
Bodily Injury	
Each Person	\$1,000,000
Each Accident	\$1,000,000
Property Damage	
Each Accident	\$1,000,000
Combined Single Limit	
Combined Single Limit for Bodily Injury and Property Damage	\$1,000,000

D. Umbrella or Excess Liability:

1. Purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the Paragraphs A through C above. The coverage afforded must be at least as broad as that of each underlying policy.
2. Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy. If such umbrella or excess liability policy was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$1,000,000 after accounting for partial attribution of its limits to underlying policies, as allowed above.
3. Provide the following coverage with not less than the minimum limits indicated:

Umbrella or Excess Liability Insurance	Policy Limits
Each Occurrence	\$1,000,000
General Aggregate	\$1,000,000

E. Contractor's Pollution Liability Insurance:

1. Purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from the Contractor's operations and completed operations. This insurance must be maintained for no less than 3 years after Final Completion.
2. Provide the following coverage with not less than the minimum limits indicated:

Contractor's Pollution Liability Insurance	Policy Limits
Each Occurrence	\$1,000,000

Contractor's Pollution Liability Insurance	Policy Limits
General Aggregate	\$2,000,000

F. Contractor's Professional Liability Insurance:

1. Purchase and maintain applicable professional liability insurance if Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of 2 years after Substantial Completion. The policy must pre-date the commencement of furnishing services on the Project.
2. Provide the following coverage with not less than the minimum limits indicated:

Contractor's Professional Liability Insurance	Policy Limits
Each Claim	\$1,000,000
Annual Aggregate	\$1,000,000

G. Unmanned Aerial Vehicle Liability Insurance:

1. Purchase and maintain Unmanned Aerial Vehicle (UAV—commonly referred to as drones) liability insurance if Contractor uses UAV at the Site or in support of any aspect of the Work. Insurance must provide coverage for property damage, bodily injury or death, and invasion of privacy.
2. Provide the following coverage with not less than the minimum limits indicated:

Unmanned Aerial Vehicle Liability Insurance	Policy Limits
Each Claim	\$1,000,000
Annual Aggregate	\$1,000,000

2.02 BUILDER'S RISK INSURANCE

- A. Purchase and maintain builder's risk insurance on a completed value basis in the amount of the Work's full insurable replacement cost.
1. The builder's risk insurance must be written on a builder's risk "all risk" policy form that, at a minimum, includes insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment stored and in transit, and must not exclude the coverage of the following risks: fire; windstorm; hail; flood; earthquake, volcanic activity, and other earth movement; lightning; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; and water damage (other than that caused by flood).
 - a. Policy must include coverage for losses from physical damage or loss with respect to defective workmanship, methods, design, or materials.
 - b. Provide other insurance policies acceptable to Owner if insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake, volcanic activity, and other earth movement; or flood, are

not commercially available under builder's risk policies, by endorsement or otherwise.

2. The builder's risk insurance must cover, as insured property, at least the following:
 - a. Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property;
 - b. Spare parts inventory required by the Contract; and
 - c. Temporary works which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures but are not intended to form part of the permanent constructed Work.
 3. The builder's risk insurance must be maintained in effect until the Work is complete, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first.
 4. The builder's risk insurance must:
 - a. Cover expenses incurred in the repair or replacement of any insured property (including fees and charges of contractors, engineers, and architects).
 - b. Allow for the waiver of the insurer's subrogation rights, as set forth in this Contract.
 - c. Allow for partial occupancy or use by Owner by endorsement, and without cancellation or lapse of coverage.
 - d. Include performance/hot testing and startup, if applicable.
 - e. Cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier). If this coverage is subject to a sublimit, such sublimit will be a minimum of Contract Price.
 - f. Cover damage or loss to insured property while in transit. If this coverage is subject to a sublimit, such sublimit will be a minimum of Contract Price.
 5. If debris removal in connection with repair or replacement of insured property is subject to a coverage sublimit, such sublimit will be a minimum of Contract Price.
 6. The builder's risk insurance must include as named insureds the Owner, Contractor, subcontractors (of every tier), and any other individuals or entities required by this Contract to be insured under such builder's risk policy.
 7. In addition to Owner, Contractor, and subcontractors of every tier, include the following as insured:
 - a. Freese and Nichols, Inc.
- B. The builder's risk policy will include, for the benefit of Owner, loss of revenue and soft cost coverage for losses arising from delays in completion that result from covered physical

losses or damage. Such coverage will include, without limitation, fixed expenses and debt service for a minimum of 12 months with a maximum deductible of 30 days, compensation for loss of net revenues, rental costs, and attorneys' fees and engineering or other consultants' fees, if not otherwise covered.

2.03 INSTALLATION FLOATER

- A. Provide and maintain installation floater insurance on a broad form or "all risk" policy providing coverage for materials, supplies, machinery, fixtures, and equipment that will be incorporated into the Work ("Covered Property"). Coverage under the Contractor's installation floater will include loss from covered "all risk" causes (perils) to Covered Property:
 - 1. of the Contractor, and Covered Property of others that is in the Contractor's care, custody, and control;
 - 2. while in transit to the Site, including while at temporary storage sites;
 - 3. while at the Site awaiting and during installation, erection, and testing;
 - 4. continuing at least until the installation or erection of the Covered Property is completed, and the Work into which it is incorporated is accepted by Owner.
- B. The installation floater coverage cannot be contingent on an external cause or risk or limited to property for which Contractor is legally liable.
- C. The installation floater coverage will be in an amount sufficient to protect the Contractor's interest in the Covered Property. The Contractor will be solely responsible for any deductible carried under this coverage.
- D. This policy will include a waiver of subrogation applicable to Owner, Contractor, Design Professional, all subcontractors, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them.

2.04 OWNER'S LIABILITY INSURANCE

- A. Contractor is required to provide Owner's Protective Liability Insurance coverage for at least the following amounts, unless greater amounts are required by Laws and Regulations.

Owner's Liability Insurance	Policy Limits
General Aggregate	\$1,000,000
Each Occurrence (Bodily Injury and Property Damage)	\$1,000,000

END OF SECTION

Advertisement for Bids

Notice is hereby given that the City of Shawnee
(hereinafter called the "Owner") will receive sealed bids at 16 W 9th St.,
Pottawatomie County, Oklahoma, until the _____ day of _____, 20²⁴, for the
N. Midland Addition Waterline Replacement

_____.

Funding for this project is provided through American Rescue Plan Act (ARPA) grant program. As such, compliance with Labor Standards Contract Provisions is mandatory. Compliance with the Davis Bacon Act is mandatory **if the total project cost exceeds \$10,000,000 (ten million dollars).**

All bids received at said time will be opened and evaluated for completeness and correctness. All work shall be performed, and all construction and materials used and furnished shall be in accordance with the Plans and Specifications prepared by Freese and Nichols, Inc., and on file in the office of City Clerk of Shawnee.

The Bid Packet and Contract Documents for this project may be examined at the following locations:

1. City of Shawnee, 222 N Broadway Shawnee, OK 74801
2. www.civcastusa.com
3. _____

A complete set of Plans and Specifications may be obtained by the prospective bidders at these locations upon deposit of \$⁰_____. Upon return of a complete set, in good condition, within _____ days after the time of bid opening, \$⁰_____ will be refunded.

Each bidder shall accompany his original bid, filed with the City Clerk, with a certified or Cashier's Check on a solvent bank located in Oklahoma, or a Bidder's Bond, in the amount of five (5) percent of the amount bid, as a guarantee of his ability to perform the contract bid upon, and that he will enter into a written contract with the Owner to perform said work and/or furnish said materials in accordance with said Plans and Specifications, and furnish the required bonds according to the Public Competitive Bidding Act of 1974.

The Owner will retain the deposit for liquidated damages in case the successful bidder fails to enter in said contract and furnish the required bonds provided for in the specifications within the time required. Deposit of the unsuccessful bidders will be returned upon the execution of the Contract

and required bonds.

Each bidder shall accompany his bid with a sworn statement in writing that the bidder has not directly or indirectly entered into an agreement, expressed or implied, with any other bidder concerning the price or amount of such bid or any bids, the limiting of the bids or bidders, the paying to anyone any money for promotion expenses, the parceling or farming out to any bidder or bidders or other persons of any part of the contract or any part of the subject matter of the bid or of the profits thereof.

Construction, Maintenance and Statutory Payment Bonds in the amount of 100% of the contract price are required for this project. These bonds must be obtained from a Corporate Surety licensed in Oklahoma and approved by the Owner and Consulting Engineer. The bidder shall state in the proposal the name and address of the Surety or Sureties who will sign this bond in case the contract is awarded. The Maintenance Bond required will guarantee the repair of all damage due to improper materials or workmanship for a period of one (1) year after the acceptance of the work by the Owner.

This project is to be financed by the ARPA grant program managed by the Oklahoma Water Resources Board (OWRB) and shall be referred to as Project No. ARP-23 - 0015 - DPG. The following requirements and regulations must be complied with:

- A. "Equal Opportunity in Employment: All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age or physical handicap. Bidders on this work will be required to comply with the President's Executive Order No. 11246, as amended."
- B. "Each bidder must fully comply with the requirements, terms and conditions of the Environmental Protection Agency's Disadvantaged Business Enterprise Requirements, which have been adopted for the OWRB ARPA program, and include employing the six (6) good faith efforts and soliciting disadvantaged business enterprises during the performance of this contract. Requirements are contained in OWRB's Guidance and Procedures, ARP-267. The bidder commits itself to following the good faith efforts to solicit disadvantaged business enterprises contained herein and all other requirements, terms, and conditions of these bid conditions by submitting a properly signed bid."
- C. **If the total project cost exceeds \$10,000,000 (ten million dollars)** "Davis Bacon Act wage rules shall apply. All laborers and mechanics employed by contractors and sub-contractors on projects funded directly by or assisted in whole or in part by and through the Federal Government shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of Chapter 31 of Title 40, United States Code and 29 CFR

parts 1,3, and 5. The Department of Labor provides all pertinent information related to compliance with labor standards, including prevailing wage rates and instructions for reporting. More information is available at <http://www.sam.gov/>” and <https://www.dol.gov/agencies/whd/government-contracts/construction>

- D. System for Award Management (SAM) registration is required for all Applicants and Awardees (Entities, Prime Contractors, Subcontractors, Vendors) in order to receive funds from the ARPA program. SAM replaced the Central Contractor Registration/Federal Agency Registration, Online Representations and Certifications Application, and Excluded Parties List System. Applicants and awardees are required to complete a one-time free registration to provide basic information relevant to procurement and financial transactions. On April 4, 2022, the unique entity identifier used across the federal government changed from the DUNS Number to the Unique Entity ID (generated by SAM.gov). Registrants must retain an active status to be eligible for ARPA funding. Applicants and Awardees can go to SAM.gov to complete the registration process.

The bids filed with the City Clerk will be opened and considered by the Owner, at a meeting to be held in 16 w. 9th St., Shawnee, OK 74801-6812, on the 14 day of January, 2025. Bids received more than ninety-six (96) hours prior to the Bid Opening will be returned.

The contract is to be awarded to the lowest, responsive, responsible bidder. The Owner reserves the right to correct any non-material clerical errors in the bidding as allowed under Oklahoma Law. The Owner reserves the right to reject any and all bids in accordance with the Oklahoma Public Competitive Bidding Act of 1974. Conditional bids shall not be accepted.

A pre-bid conference will be held on this project at 16 W 9th St., Shawnee, OK 74801 on the 7 day of January, 2025.

Approved on this day of , 20 .

Information for Bidders

Notice is hereby given that the City of Shawnee (hereinafter called the "Owner") will receive sealed bids at 16 W 9th St, Shawnee,
Pottawatomie County, Oklahoma, until the 14th day of January, 2025, for the
N. Midland Addition Waterline Replacement

_____.

This project is to be financed by the ARPA grant program managed by the Oklahoma Water Resources Board (OWRB) and shall be referred to as Project No. ARP-23 - 0015 - DPG. The following requirements and regulations must be complied with:

- A. "Equal Opportunity in Employment: All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age or physical handicap Bidders on this work will be required to comply with the President's Executive Order No. 11246, as amended."
- B. " Each bidder must fully comply with the requirements, terms, and conditions of the Environmental Protection Agency's Disadvantaged Business Enterprise Requirements, which have been adopted for the OWRB ARPA program, and include employing the six (6) good faith efforts and soliciting disadvantaged business enterprises during the performance of this contract. Requirements are contained in OWRB's Guidance and Procedures, ARP-267. The bidder commits itself to following the good faith efforts to solicit disadvantaged business enterprises contained herein and all other requirements, terms, and conditions of these bid conditions by submitting a properly signed bid."
- C. **If the total project cost exceeds \$10,000,000 (ten million dollars)** "Davis Bacon Act wage rules shall apply. All laborers and mechanics employed by contractors and sub-contractors on projects funded directly by or assisted in whole or in part by and through the Federal Government shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of Chapter 31 of Title 40, United States Code and 29 CFR parts 1,3, and 5. The Department of Labor provides all pertinent information related to compliance with labor standards, including prevailing wage rates and instructions for reporting. More information is available at <https://www.dol.gov/agencies/whd/government-contracts/construction> and <http://www.sam.gov/>"

D. System for Award Management (SAM) registration is required for all Applicants and Awardees (Entities, Prime Contractors, Subcontractors, Vendors) in order to receive funds from the ARPA program. SAM replaced the Central Contractor Registration/Federal Agency Registration, Online Representations and Certifications Application, and Excluded Parties List System. Applicants and awardees are required to complete a one-time free registration to provide basic information relevant to procurement and financial transactions. On April 4, 2022, the unique entity identifier used across the federal government changed from the DUNS Number to the Unique Entity ID (generated by SAM.gov). Registrants must retain an active status to be eligible for ARPA funding. Applicants and Awardees can go to SAM.gov to complete the registration process.

Each sealed envelope containing a bid must be plainly marked on the outside as “Bid for N. Midland Addition Waterline Replacement”, and the envelope should bear on the outside the bidder’s name, address, and license number (if applicable). If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to the Owner at 16 W 9th St, Shawnee, OK 74801.

All bids must be made on the required bid form, where all blank spaces for bid prices must be filled in, in ink or typewritten. The bid form must be fully completed and executed when submitted. Only one copy of the bid form is required. The Owner may waive any informalities or minor defects or reject any and all bids as allowed under Oklahoma Law. Any bid may be withdrawn prior to the above scheduled time for bid opening, or authorized postponement thereof. Bids received more than ninety-six (96) hours before the time specified, or those received after the time set for bid opening will not be considered and will be returned unopened. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the bidders.

Bidders must satisfy themselves of the accuracy of estimated quantities in the bid proposal by review of the Plans and Specifications, including any existing addenda, and by examination of the project site. Once a bid is submitted, the bidder shall not assert that there was a misunderstanding concerning the quantities or the nature of work to be performed. The failure or omission of any bidder to do any of the foregoing shall in no way relieve any bidder from any obligation in respect to its bid.

Prior to bidding, the Owner shall provide to the bidders all pertinent information that delineates and describes the land owned and rights-of-way acquired or to be acquired.

The Contract Documents contain the provisions required for the construction of the product. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the contractor or relieve the contractor from fulfilling

any of the conditions of the contract.

Each bid exceeding \$100,000 must be accompanied by a Bid Bond for five percent of the total amount of the bid and payable to the Owner. A certified check may be used in lieu of the Bid Bond. As soon as the bid prices have been compared, the Owner will return the bonds of all except the three lowest responsive, responsible bidders. The bid securities of the successful bidder and the two remaining unsuccessful bidders will be returned upon Owner's approval of the successful bidder's executed certificate of insurance and construction bonds.

Construction bonds (Performance, Statutory, and Maintenance) in the amount of 100 percent with a corporate surety approved by the Owner will be required for the faithful performance of the contract. Attorneys-in-fact who sign bid and construction bonds must file with each bond a certified and effective dated copy of their Power-of-Attorney.

The Owner shall award a contract to the lowest, responsive, responsible bidder or bidders within thirty (30) calendar days after bid opening. The Owner may extend the award period not to exceed fifteen (15) calendar days by formal recorded action and for good cause. The time may be extended further by mutual agreement between the Owner and the bidder per O.S. Title 61 Section 111, Public Competitive Bidding Act of 1974 (PCBA).

The Notice of Award shall be accompanied by the necessary contract, bonds, and insurance. In the event of failure of the bidder to execute the contract, the Owner may consider the bidder in default, in which case the Bid Bond accompanying the proposal shall become the property of the Owner.

The party to whom the contract is awarded will be required to execute the contract and obtain the construction bonds (Performance, Statutory and Maintenance) and certificate of insurance within 10 calendar days (not to exceed 60 days) from the date when the Notice of Award is delivered to the bidder. The time may be extended further by mutual agreement between the Owner and the bidder per O.S. Title 61 Section 113 (PCBA).

With an acceptable contract, bonds and certificate of insurance signed by the party to whom the Contract was awarded, the Owner shall sign the contract and return to such party an executed duplicate. Should the Owner not execute the contract within the agreed upon period, the bidder may by written notice withdraw the signed contract. Such notice of withdrawal shall be effective upon its receipt by the Owner.

The Owner shall issue the Notice to Proceed after the execution of the contract, approval of bonds and certificate of insurance. If the Notice to Proceed has not been issued within the agreed upon period, the contractor may terminate the contract without further liability on the part of either party.

The Owner may make such investigations as deemed necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of such bidders fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.

A conditional or qualified bid will not be accepted. Tied bids are non-restrictive, and in order for a tied bid to be accepted it must be lower than the sum of low separate bids.

All applicable laws, ordinances, rules, and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout. The successful bidder will be required to meet all requirements of the Underground Facilities Damage Prevention Act when engaged in work within public rights-of-way.

When using alternate bids, they will be listed in numerical order, with the highest priority being number one, the second highest priority being number two, etc. The lowest bidder will be determined by comparing all bids that contain the selected alternates and computing the total value of the base bid plus the alternates.

All bidders and owners shall comply with the Oklahoma PCBA of 1974.

The awarded bidder shall supply the names and addresses of all subcontractors and material suppliers when required to do so by the Owner.

To avoid bypassing of raw sewage during construction, the contractor shall use the methods and/or schedule(s) described in Section _____ of these Specifications, or the method(s) and/or schedule(s) described as follows:

The Contractor will be required to begin work within 30 calendar days of the date shown on the Notice to Proceed. The time for completion is 120 calendar days. Liquidated damages will be \$ 500 per calendar day.

In the event of a conflict between the Plans and the Specifications, the Specifications will govern.

The following items, included in this Bid Packet, shall be submitted along with the bid: Bid Proposal, Bid Bond, Non-Collusion Affidavit, Business Relationship Affidavit, Contractor's

Statement about Equal Opportunity (ARP-211), Contractor's Certificate of Non-Segregated Facilities (ARP-212), Sub-Contractor's Certificate of Non-Segregated Facilities (ARP-212a) Bidder's/Supplier's List (ARP-249), Subcontractor Performance form (ARP-6100-3), Subcontractor Utilization form (ARP-6100-4) and DBE documentation (if applicable).

The consulting engineer is Freese and Nichols. The consulting engineer's contact person for this project is Jonathan Faughtenberry, with phone number 5392023239.

Disadvantaged Business Enterprise Program (DBE) Guidance (ARP-267)

Important note: All OWRB ARPA information can be found at: <https://www.owrb.ok.gov/financing/grant/arpa.php>

The OWRB is administering the State of Oklahoma's ARPA funding for various wastewater and water quality projects. The ARPA program is federally funded, and one of the conditions of federal grant awards is for recipients and sub-recipients (i.e., prime contractors and subcontractors) make a good-faith effort to award a fair share of work to DBEs who are small business enterprises (SBEs), minority business enterprises (MBEs) and women's business enterprises (WBEs).

To ensure compliance with federal DBE requirements, both **Grant Recipients (Project Owners)** and **Prime Contractors** **must** undertake the good faith efforts to provide opportunities for DBE firms to participate in contracts. Federal regulations require evidence of the demonstration of the six good faith efforts in trying to achieve the DBE participation goals. The Oklahoma Department of Transportation has a Directory of Certified DBE Firms. This directory can be accessed at <https://okdot.gob2g.com/Default.asp>

Good Faith Efforts: EPA's Good Faith Efforts for the Clean Water State Revolving Fund (CWSRF) will be used for the OWRB ARPA grant program. The following good faith efforts will apply to all procurement categories involving ARPA funds (See Appendices A& B).

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For state and local government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For state and local government recipients, this will include dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance of the Small Business Administration (SBE) and the Minority Business Development Agency of the Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.

Please submit all information to:

Financial Assistance Division, OWRB
3800 North Classen Blvd, Oklahoma City, OK 73118
Phone: 405.530.8800, FAX: 405.530.8900
<http://www.owrb.ok.gov>

Disadvantaged Business Enterprise Program (DBE) Guidance

Demonstration of the Six Good Faith Efforts. See Appendices A & B for additional bidding instructions and contract administrative provisions.

A: Project Owners are required to create and maintain a bidders list in accordance with Subpart E of Part 33 of EPA's Disadvantaged Business Enterprise Program rule, (§ 33.501(b)). This requirement will be adopted for projects funded through the OWRB ARPA program. The list must include all firms that bid or quote on prime contracts, or bid or quote subcontracts, on competitively bid ARPA funded projects. The bidders list must only be kept until the project period for the identified grant has ended. The following information must be obtained from all prime and subcontractors and can be provided on Bidders List (ARP-249):

1. Entity's name with point of contact
2. Entity's mailing address, telephone number, and e-mail address
3. The procurement on which the entity bid or quoted, and when; and
4. Entity's status as an MBE/WBE or non-MBE/WBE

B: Project Owners are required to undertake good faith efforts. Steps 1 through 5 can be utilized during the project planning, design and/or pre-bidding phase, to assure that qualified DBE firms have procurement opportunities in construction, equipment, services, and supplies.

To provide procurement opportunities to DBE Firms, the Project Owner should undertake the following:

- Conduct pre-bid meetings to inform potential bidders/contractors about DBE requirements and provide guidance in undertaking the required good faith efforts.
- Use listings of certified DBEs from the U.S. Small Business Administration (SBA), Oklahoma Department of Transportation (ODOT), etc., to solicit DBE firms as prime contractors whenever they are potential candidates. Project Owners should advertise in minority, local and regional newspapers.
- Invite DBE firms, where appropriate, to meetings, conferences etc., to inform them of procurement opportunities and develop, where possible, reasonable contract and delivery schedules that encourage and facilitate participation by DBE's. This includes, whenever possible, a minimum of 30 calendar days for bids or request for proposals.
- Determine if a project can be broken down into smaller components/contracts to allow opportunity for DBE firms to bid both as prime-contractors and as sub-contractors.
- For projects broken down into smaller components (e.g., painting, roofing, excavation, pipe laying, etc.,) ensure that the delivery schedules are reasonable.
- Encourage DBE firms, where appropriate, to apply as a consortium of DBEs, when a contract is too large for one of these firms to handle individually.
- **Require prime contractor to complete ARP Form 6100-3 & ARP Form 6100-4** and submit with bid proposal to Project Owner.

C: Project Owners must require the prime contractor to undertake steps 1 through 5 of the Good Faith Efforts in providing DBE firms opportunity for sub-contracts.

Project Owner must provide the **DBE Guidance (ARP-267)** and associated forms to Prime Contractors for utilization of DBEs in the bidding documents.

APPENDIX A: Project Owner, Prime Contractor and Sub-Contractor Responsibilities

EPA's Disadvantaged Business Enterprise Program rule applies to contract procurement actions funded in part by EPA assistance agreements awarded after May 27, 2008. The rule is found at Federal regulation Title 40, Part 33. Specific responsibilities are highlighted below.

Project Owner Responsibilities:

- Include OWRB's DBE guidance (ARP-267) in each contract with a primary contractor.
- Employ the six Good Faith Efforts during prime contractor procurement (§33.301).
- Require prime contractor to comply with the following prime contractor requirements of Title 40 Part 33:
 - a) To employ the six Good Faith Efforts steps in paragraphs (a) through (e) of § 33.301 if the prime contractor awards subcontracts (§ 33.301(f)).
 - b) To provide **ARP form 6100-2 – DBE Subcontractor Participation Form to all DBE subcontractors** (Optional submittal by subcontractors) (§ 33.302(e)).
 - c) To submit **ARP form 6100-3 – DBE Program Subcontractor Performance Form and ARP form 6100-4 – DBE Program Subcontractor Utilization Form with bid package or proposal.** (§ 33.302 (f) and (g)).
 - d) To pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient (§ 33.302(a)).
 - e) To notify recipient in writing by its prime contractor prior to any termination of a DBE subcontractor for convenience by the prime contractor (§ 33.302(b)).
 - f) To employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor after a DBE subcontractor fails to complete work under the subcontract for any reason. (§ 33.302(c)).
 - g) To employ the six good faith efforts described in § 33.301 even if the prime contractor has achieved its fair share objectives under subpart D of Part 33. (§33.302(d)).
 - h) Provide Project Owner DBE participation achievements with bid proposal – this includes all information necessary for the Owner to complete the **Bidders List (ARP-249)**. The Owner may allow the prime contractor to complete the **Bidders List (ARP-249)**; however, the **Owner is responsible for review and submittal.**
- Maintain records documenting compliance with the requirements of Title 40 Part 33, including **Bidders List (ARP-249)** and documentation of the good faith efforts (§ 33.301(a)) by the project owner and prime contractor.

Prime Contractor Responsibilities:

- Employ the six Good Faith Efforts steps in paragraphs (a) through (e) of § 33.301 if the prime contractor awards subcontracts (§ 33.301(f)).

- Provide **ARP form 6100-2 – DBE Program Subcontractor Participation Form** and **ARP form 6100-3 – DBE Program Subcontractor Performance Form** to each DBE subcontractor as part of the bid conference and prior to opening of the contractor's bid or proposal (§ 33.302(e) and (f)). Complete **ARP form 6100-4 – DBE Program Subcontractor Utilization Form** (§ 33.302(g))
- Submit to recipient with bid package or proposal the completed **ARP form 6100-4**, plus an **ARP form 6100-3** for each DBE subcontractor used in the contractor's bid or proposal (§ 33.302(f) and (g)).
- Pay subcontractors for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the Project Owner (§ 33.302(a)).
- Notify the recipient in writing prior to prime contractor termination of a DBE subcontractor for convenience (§ 33.302(b)).
- Employ the six good faith efforts described in (§ 33.301) if soliciting a replacement subcontractor after a DBE subcontractor fails to complete work under the subcontract for any reason. (§ 33.302(c)).
- Employ the six good faith efforts described in (§ 33.301) even if the prime contractor has achieved its fair share objectives under subpart D of Part 33. (§33.302(d)).
- Provide Project Owner DBE participation achievements with bid proposal. This includes information necessary for Owner's completion of the **Bidders List (ARP-249)**.
- Maintain records documenting its compliance with the requirements of Title 40 Part 33, including **Bidders List (ARP-249)** and documentation of the good faith efforts (§ 33.301(a)) by the project owner and prime contractor.

Subcontractor Responsibilities:

- May submit **ARP form 6100-2 – DBE Subcontractor Participation Form** to Debra Bradford, EPA Region 6 DBE Coordinator (§ 33.302(e)). Submitted if concerns with EPA funded project (e.g., termination, late payment, etc.)
- Must complete **ARP form 6100-3 – DBE Program Subcontractor Performance Form** and submit it to the prime contractor soliciting services from the subcontractor prior to the opening of bids for the prime contract.

Summary of ARP Forms

ARP Form	Requirement	Provided By	Completed By	Submitted To
6100-2: DBE Subcontractor Participation Form	Project Owners required to have prime contractors provide form to Subcontractors	Prime Contractors to DBE Subcontractors	DBE Subcontractors if concerns with EPA funded project (e.g., termination, late payment, etc.)	EPA Region 6 DBE Coordinator, Debora Bradford
6100-3: DBE Subcontractor Performance Form	Project Owners required to have prime contractors provide form to Subcontractors	Prime Contractors to DBE Subcontractors	DBE Subcontractors with Prime Contractor's Signature. Completed when bidding on a job.	Project Owners as part of a bid or proposal package
6100-4: DBE Subcontractor Utilization Form	Project Owners required to have prime contractors complete the form	Project Owners to Prime Contractors	Prime Contractors to indicate the utilization of a DBE.	Project Owners as part of bid or proposal

APPENDIX B: TITLE 40 PART 33 SUBPART C—GOOD FAITH EFFORTS

§ 33.102 When do the requirements of this part apply?

The requirements of this part apply to procurement under ARPA Grant program agreements performed entirely within the United States, whether by a Project Owner or its prime contractor, for construction, equipment, services, and supplies.

§ 33.106 What assurances must ARPA Grant program recipients obtain from their contractors?

The recipient must ensure that each procurement contract it awards contains the term and condition specified in Appendix A to this part concerning compliance with the requirements of this part.

§ 33.206 Is there a list of certified MBEs and WBEs?

The Oklahoma Department of Transportation has a Directory of Certified DBE Firms. This database can be found at this website: <https://okdot.gob2g.com/Default.asp>.

§ 33.301 What does this subpart require?

A recipient, including one exempted from applying the fair share objective requirements by § 33.411, is required to make the following good faith efforts whenever procuring construction, equipment, services, and supplies under an ARPA Grant program agreement, even if it has achieved its fair share objectives under subpart D of this part:

- a) Ensure DBEs are made aware of contracting opportunities fully practicable through outreach and recruitment activities. For State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
- b) Make information on forthcoming opportunities available to DBE's, arrange periods for contracts, and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- c) Consider in the contracting process whether firms competing for large contracts could subcontract with DBE's. For state and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
- d) Encourage contracting with a consortium of DBE's when a contract is too large for one of these firms to handle individually.
- e) Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
- f) If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

§ 33.302 Are there any additional contract administration requirements?

- a) Project Owners must require its prime contractor to pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient.
- b) Its prime contractor must notify Project Owner in writing prior to any termination of a DBE subcontractor for convenience by the prime contractor.
- c) If a DBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor.
- d) A project owner must require its prime contractor to employ the six good faith efforts described in §33.301 even if the prime contractor has achieved its fair share objectives under §33.301 subpart D above.

- e) A recipient must require its prime contractor to provide **ARP Form 6100-2**—DBE Program Subcontractor Participation Form to all of its DBE subcontractors. **ARP Form 6100-2** gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from the prime contractor, how much the DBE subcontractor was paid and any other concerns the DBE subcontractor might have, for example reasons why the DBE subcontractor believes it was terminated by the prime contractor. DBE subcontractors may send completed copies of **ARP Form 6100-2** directly to the appropriate EPA DBE Coordinator.
- f) A recipient must require its prime contractor to have its DBE subcontractors complete **ARP Form 6100-3**—DBE Program Subcontractor Performance Form. A recipient must then require its prime contractor to include all completed forms as part of the prime contractor's bid or proposal package.
- g) A recipient must require its prime contractor to complete and submit **ARP Form 6100-4**—DBE Program Subcontractor Utilization Form as part of the prime contractor's bid or proposal package.
- h) Copies of **ARP Form 6100-2**—DBE Program Subcontractor Participation Form, **ARP Form 6100-3**—DBE Program Subcontractor Performance Form and **ARP Form 6100-4**—DBE Program Subcontractor Utilization Form may be obtained from EPA OSDBU's Home Page on the Internet or directly from EPA OSDBU.
- i) A recipient must ensure that each procurement contract it awards contains the term and condition specified in the Appendix A concerning compliance with the requirements of this part. A recipient must also ensure that this term and condition is included in each procurement contract awarded by an entity receiving a grant under federal financial assistance agreement.

§ 33.410 Can a recipient be penalized for failing to meet its fair share objectives?

A recipient cannot be penalized or treated by EPA as being in noncompliance with this subpart, solely because its MBE or WBE participation does not meet its applicable fair share objective. However, EPA may take remedial action under § 33.105 for a recipient's failure to comply with other provisions of this part, including, but not limited to, the good faith efforts requirements described in subpart C of this part.

Source: *Federal Requirements and Contract Provisions for Special Appropriation Act Projects, US Environmental Protection Agency, Region III, June 2008*

APPENDIX C: RESOURCE LISTING AND CONTACT INFORMATION
FOR UTILIZATION OF MINORITY AND WOMEN’S BUSINESS ENTERPRISES

Resource Listing	Contact Information	Website if applicable
U.S. Small Business Administration (SBA) In addition to the national office, the SBA has local district and regional offices to assist small businesses in contracting with the public and private sector.	US Small Business Administration 409 3rd St, SW Washington DC 20416 Phone: 800-827-5722	https://www.sba.gov/
U. S. Small Business Administration (SBA) - OK. District Office	301 NW 6 th St. Oklahoma City, OK 73102 Phone: 405.609.8000	https://www.sba.gov/offices/district/ok/oklahoma-city
Minority Business Development Administration (MBDA): The MBDA is an agency within the U.S. Dept. of Commerce, created to foster the development and growth of minority businesses in the U.S. and coordinates resources in the public and private sectors to help MBEs.	1401 Constitution Ave NW Washington, D.C. 20230 Email: support@mbda.gov Phone: (202) 482-2000	http://www.mbda.gov/
Standard Industrial Classification Codes (SIC) or North American Industry Classification System (NAICS) codes visit the websites.	U.S. Bureau of Labor Statistics Postal Square Building, 2 Massachusetts Ave. NE Washington, DC 20212-0001 Phone: 1-202-691-5200	http://www.bls.gov/iag/tgs/iag_index_naics.htm
Oklahoma Department of Transportation (ODOT) and the <u>Minority/Disadvantaged Business Enterprise (ODOT – MBE/DBE)</u> . Project Owners and bidders may locate qualified M/WBE’s through the MBE/WBE Directory	200 NE 21 st Street Oklahoma City, OK 73105 Phone: 405.521.2082	https://okdot.gob2g.com/Default.asp .
US EPA Office of Small and Disadvantaged Business Utilization (OSDBU): advocates and advances the business, regulatory, and environmental compliance concerns of small and socio-economically disadvantaged businesses. The Small Business Vendor Profile System contains information of number of small and disadvantaged companies registered with OSDBU.	USEPA Office of Small Programs 1200 Pennsylvania Ave. NW Mail Code 1230T Washington, D.C. 20460 Phone: 202 566-2075	https://www.epa.gov/aboutepa/about-office-small-and-disadvantaged-business-utilization-osdbu Select “search the OSBP Registry” Click on the search criteria of interest (ethnicity, size, SIC, etc.)

National Black Chamber of Commerce	4400 Jenifer St NW #331, Washington, DC 20015 Phone: 202 466-6888 Fax: 202 466-4918 Email: info@nationalbcc.org	http://www.nationalbcc.org
U.S. Hispanic Chamber of Commerce	424 K St NW #401, Washington, DC 20005 Phone: (202) 842-1212	http://www.ushcc.com
National Association of Minority Contractors (NAMC)	910 17th Street, NW, Suite 413 Washington, DC 20006 Phone: 202.296.1600 info@namcnational.org	http://namcnational.org/
National Association of Women's Business Owners (NAWBO)	601 Pennsylvania Ave NW South Building, Ste 900 Washington, DC 20004 Phone: 800-556-2926 Fax: 202-403-3788	www.nawbo.org
National Minority Supplier Development Council, Inc. (NMSDC)	1359 Broadway, 10th Floor, Suite 1000 New York, NY 10018 Phone: (212) 944-2430 Fax: (212) 719-9611	http://www.nmsdc.org/
Native American Development Corporation (NADC) - provides technical assistance, financial lending opportunities, and champions small businesses	17 N. 26th St. Billings, MT 59101 Phone: (406) 259-3804 Fax: (406) 259-4569 Email: nadcptac@nadc-nabn.org	http://www.nadc-nabn.org/
City of Tulsa – Small Business Enterprise Program Maintains a list of Minority and Female business Enterprises that are certified through the “building Resources in Developing and Growing Enterprises	175 E. 2nd St. Tulsa, OK. 74103 Phone: (918) 596-7818	https://www.cityoftulsa.org/developmentbusiness/small-business-enterprise-program/ Click on the ‘member list”
Southwest Minority Supplier Development Council: Maintains lists of certified Minority Business Enterprises in Oklahoma	7301 Broadway Ext Ste 224, OKC, OK 73116 Phone: (405) 767-9900	http://www.smsdc.org/

National Association of Women in Construction (NAWIC)	327 S. Adams Street Fort Worth, TX 76104 Phone: 800-552-3506 817.877.5551 Fax: 817.877.0324	http://www.nawic.org/
Bureau of Indian Affairs - Maintains a list of Native American Contractors and Suppliers by Trade	P.O. Box 368 (1 Mile North on Hwy 281) Anadarko, OK 73005 Phone: (405) 247-6673 Fax: (405) 247-5611	https://www.bia.gov/as-ia/ieed/division-economic-development/native-american-business-development
Oklahoma Department of Commerce Certification Programs and information	900 N Stiles Ave. Oklahoma City, OK 73104 Phone: (405) 815-6552 Toll-Free: (800) 879-6552	https://www.okcommerce.gov/doing-business/#business-services
Cherokee Nation Tribal Employment Rights Office - Maintains a directory of Indian-owned businesses	Cherokee Nation TERO Dept. P.O. Box 948 Tahlequah, OK 74465 Phone: (918) 453-5334 or Toll Free: 800-256-0671 ext. 5334	http://cherokeetero.com/

ARP-6100-2 DBE Subcontractor Participation Form

OWRB Financial Assistance Agreement Recipients must require prime contractors to provide this form to their DBE subcontractors. This form gives a DBE subcontractor the opportunity to describe work received and/or report any concerns regarding the project.

Subcontractor Name	Project Name	
Bid/Proposal No.		Point of Contact
Address		
Telephone No.	Email address	
Prime Contractor Name		Funding entity Oklahoma Water Resources Board

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services , Equipment or Supplies	Amount Received by Prime Contractor

This image shows a full page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice or general writing. There are no margins, text, or other markings on the page.

Subcontractor Signature	Print Name
Title	Date

ARP-6100-3 DBE Subcontractor Performance Form

This form is intended to capture the DBE₁ subcontractor's₂ description of work to be performed and the price of the work submitted to the prime contractor. OWRB Financial Assistance Agreement Recipients must require prime contractors to provide this form to their DBE subcontractors.

Subcontractor Name	Project Name
Bid/Proposal No.	Point of Contact
Address	
Telephone No.	Email Address
Prime Contractor Name	Funding Entity Oklahoma Water Resources Board

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services , Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: ☐ DOT ☐ SBA ☐ Other: _____		Meets/ exceeds EPA certification standards? ☐ YES ☐ NO ☐ Unknown

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

Subcontractor Signature	Print Name
Title	Date

ARP-6100-4 DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE¹ subcontractors² and the estimated dollar amount of each subcontract. OWRB Financial Assistance Agreement Recipients must require their prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name	Project Name
Bid/Proposal No.	Point of Contact
Address	
Telephone No.	Email address
Funding Entity Oklahoma Water Resources Board	

I have identified potential DBE certified Subcontractors	☐ YES	☐ NO	
If yes, please complete the table below. If no, please explain:			
Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt.	Currently DBE Certified?

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

Bidder's Statement about: **Equal Opportunity Clause (ARP-211)**

Mark **one**:

- ☐ I have participated in previous contract(s) or subcontract(s) subject to the equal opportunity clause under Executive Orders 11246 and 11375 or preceding Executive Orders 10925 and 11114. I have filed all reports due under the requirements contained in 40 CFR, Part C, 8.11.
- ☐ I have not participated in previous contract(s) subject to the equal opportunity clause under Executive Orders 11246 and 11375 or preceding Executive Orders 10925 and 11114.

- ☐ I will obtain a similar statement from any proposed subcontractor(s), when appropriate.

Bidder's Statement about: **Non-Segregated Facilities (ARP-212 and ARP-212a)**

- ☐ I hereby certify that I do not and will not maintain any facilities provided for my employees in a segregated manner or permit my employees to perform their services at any location under my control where segregated facilities are maintained; and that I will obtain a similar certification prior to the award of any subcontract exceeding \$10,000 which is not exempted from the equal opportunity clause.

Bidder's Statement about: **Bonds**

- ☐ I hereby certify that I will obtain and provide a Bid Bond along with my Bid.
- ☐ I hereby certify that, in the event of being awarded a Contract, I will provide a Performance Bond for 100% of the contract amount.
- ☐ I hereby certify that, in the event of being awarded a Contract, I will provide a Statutory/Payment Bond for 100% of the contract amount.
- ☐ I hereby certify that, in the event of being awarded a Contract, I will provide a Maintenance Bond for at least 1 year after construction completion, and 100% of the contract amount

Bidder's Statement about: **sam.gov registration**

Mark **one**:

- ☐ I have registered in SAM.gov and my statut is "active".
- ☐ I am not currently registered in SAM.gov, but I will be registered and holding an "active" status prior to the beginning of any construction.

- ☐ I certify that I will actively review the SAM.gov status of all of the subcontractors in this work to verify they are registered and their status is "active".

Bidder's Statement about: **Davis Bacon Act**

If the total project cost exceeds \$10,000,000 (ten million dollars):

- ☐ I hereby certify that all of my employees will be paid according to the Davis Bacon Act.

Name and Title of Prospective Prime Contractor's Representative

Signature of Prospective Prime Contractor's Representative

Name and address of Prospective Prime Contractor

AFFIDAVITS

State of _____ ss.
County of _____

_____, of lawful age, being first duly sworn, on oath says that (s)he is the agent authorized by the bidder to submit the attached bid.

Non-Collusion

Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any government official or employee as to quantity, quality, or price in the prospective contract, or any other terms of said prospective contract; or in any discussions between bidders and any government official concerning exchange of money or other value for special consideration in the letting of a contract; that the bidder/contractor had not paid, given or donated or agreed to pay, give or donate to any officer or employee of the _____ (or other entity) any money or other thing of value, either directly or indirectly in the procurement of a contract or pursuant to this bid.

Business Relationships

Affiant further states that the nature of any partnership, joint venture, or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

_____.

Affiant further states that any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

_____.

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

_____.

If none of the business relationship herein above mentioned exists, affiant should so state.

Subscribed and sworn to before me this ____ day of _____, 20____.

Notary Public Signature

My Commission Expires: _____

CLAIM OR INVOICE AFFIDAVIT

State of _____ ss.
County of _____

The undersigned (engineer or supervisory official), of lawful age, being first duly sworn, on oath says that this (invoice, claim, or contract) is true and correct. Affiant further states that the (work, services, or materials) as shown by this invoice or claim have been (completed or supplied) in accordance with the plans, specifications, orders, or requests furnished to the affiant. Affiant further states that (s)he has made no payment, given, or donated or agreed to pay, give, or donate, either directly or indirectly, to any elected official, officer, or employee of the State of Oklahoma, of money or any other thing of value to obtain payment or the award of this contract.

Engineer/Supervisory Official signature

Subscribed and sworn to before me this ____ day of _____, 20__.

Notary Public signature

My Commission Expires: _____

NOTICE OF AWARD

Date: ____/____/____

Project: _____

Grant#: ARP-____-____-____

The _____ has considered the bid submitted by
Owner
_____ for the above referenced project in response to the
Contractor
Advertisement for Bids dated ____/____/____ and Information for Bidders. You are hereby notified
that your bid has been accepted for items in the amount of \$_____.

You are required per the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Statutory Bond, Maintenance Bond, and Certificate of Insurance within ____ calendar days from the date of this Notice. If you fail to provide these in the specified time, the Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

Owner's Authorized Representative signature

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by _____,
Contractor's Representative name

Authorized Representative of _____.
Contractor

Contractor's Authorized Representative signature

____/____/____
Date

AGREEMENT

This Agreement made this ____ day of _____, 20____ between _____
(hereinafter called the Owner) and _____ (hereinafter called the Contractor).

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The Contractor will commence and complete the work for:

_____.

2. The Contractor will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the project described herein.

3. The Contractor will commence the work required by the Contract documents within _____ calendar days after the date of the Notice to Proceed and will complete the same within _____ calendar days unless the period for completion is extended otherwise.

4. The Contractor agrees to perform all the work described in the Contract documents and comply with the terms therein for the sum of \$ _____ or as shown in the Bid Schedule.

5. The term "Contract documents" means and includes the following:

- | | |
|--------------------------------------|------------------------------|
| (A) Advertisement for Bids | (I) Standard Requirements |
| (B) Information for Bidders | (J) Statutory Bond |
| (C) Bid Proposal | (K) Performance Bond |
| (D) Bid Schedule | (L) Maintenance Bond |
| (E) Business Relationships Affidavit | (M) Certificate of Insurance |
| (F) Non-collusion Affidavit | (N) Notice of Award |
| (G) Bid Bond | (O) Notice to Proceed |
| (H) Agreement | (P) Change Order |
| (Q) Drawings prepared by _____. | |

Numbers _____ through _____ and dated ____/____/____.

(R) Specifications prepared by _____, dated ____/____/____.

(S) ADDENDA:

No. _____, dated ____/____/____

No. _____, dated ____/____/____

No. _____, dated ____/____/____

No. _____, dated ____/____/____

6. The Owner will pay to the Contractor in the manner and at such times as set forth in the Standard Requirements such amounts as required by the Contract documents.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

8. It is understood that the following are also required of the Contractor in performance of this contract:

- a. Liquidated damages for failure to complete the work within the time specified shall be assessed at the rate of \$_____ per day for each additional calendar day until the work is completed.
- b. Contractor shall comply with the Underground Facilities Damage Prevention Act (63 O.S. 42.1 et seq.).

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized officials, this Agreement in _____ copies each of which shall be deemed an original on the date first above written.

_____ Owner's Authorized Representative	_____ Title	_____ Signature	____/____/____ Date
_____ Attested by	_____ Title	_____ Signature	____/____/____ Date
_____ Contractor's Authorized Representative	_____ Title	_____ Signature	____/____/____ Date
_____ Attested by	_____ Title	_____ Signature	____/____/____ Date

NOTICE TO PROCEED

Date: ____/____/____

Project: _____

Grant#: ARP-____-____-____

Notice is hereby given to _____ to commence work on the above
Contractor
referenced project on or before ____/____/____. In accordance with the Agreement dated
____/____/____, you are to complete the work within ____ consecutive calendar days. The date of
completion of all work is ____/____/____.

Owner's Authorized Representative signature

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by _____,
Contractor's Representative name

Authorized Representative of _____.
Contractor

Contractor's Authorized Representative signature

____/____/____
Date

**CERTIFICATE OF APPROVAL OF CONTRACTS AND BONDS BY LOCAL
ATTORNEY**

I, the undersigned _____,
the duly authorized and acting legal representative of the _____,
after careful examination of the Contract between this Entity and
_____, and the surety bonds given by the contractor in
connection with the performance of said contract, do hereby certify that:

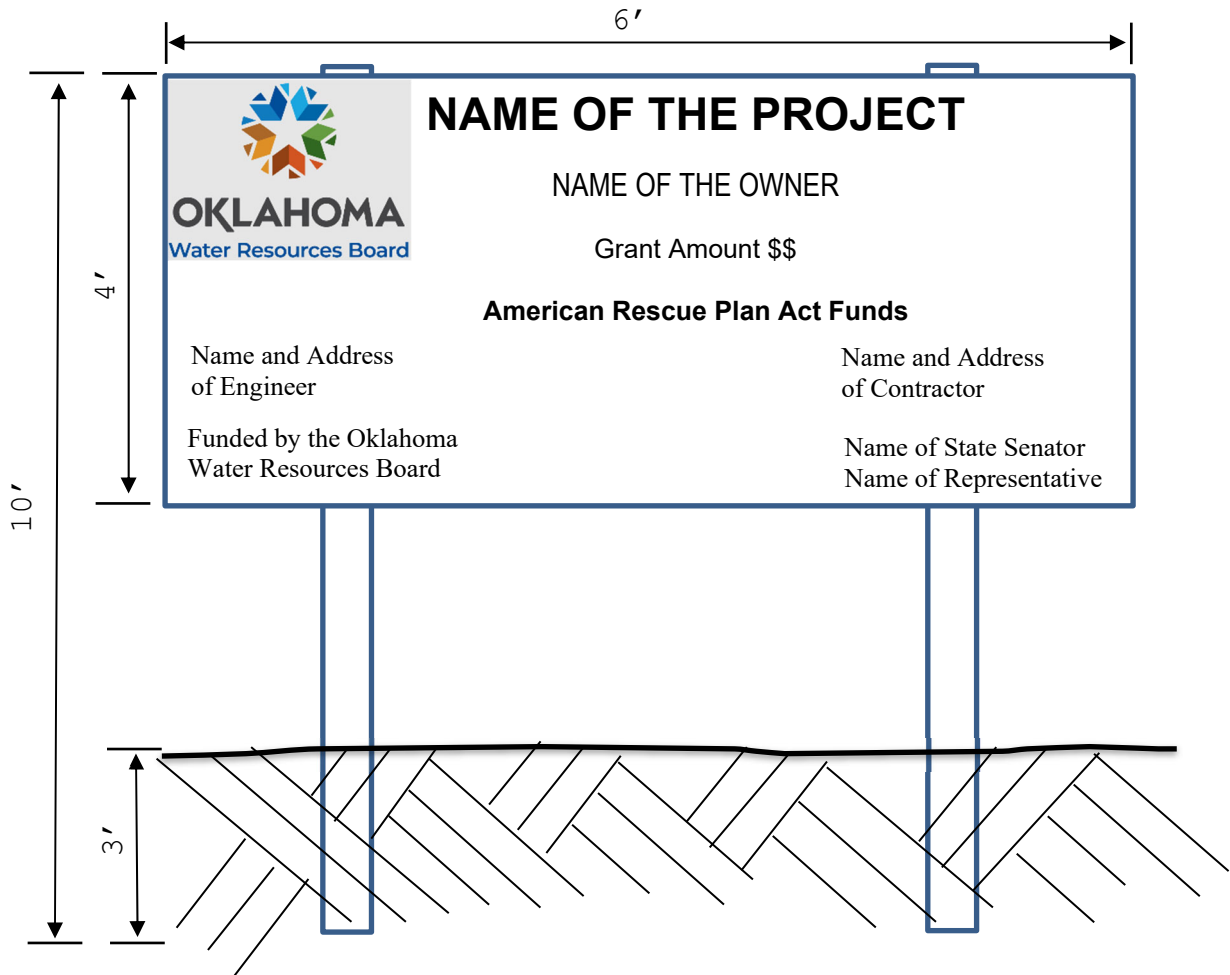
1. Each of the aforesaid agreements has been duly executed by the proper parties thereto, acting through their duly authorized representatives.
2. Said representatives have full power and authority to execute said agreements on behalf of the respective parties named therein.
3. The foregoing contract and surety bonds, as applicable, constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions, and provisions thereof.

Dated this ____ day of _____, 20__.

Attorney's signature

PROJECT SIGN

- The general contractor shall erect and maintain for the life of the construction contract a suitable sign, 4' x 6' in size, and detailed hereon, lettered black on white background. Sign shall be professionally painted. Lettering to be appropriate size. No separate bid item. Sign shall be the general obligation of the Contractor.
- The OWRB logo is required on the project sign if the project is funded in part with OWRB Financial Assistance Program funds. The OWRB logo is available at <http://www.owrb.ok.gov/about/index.php> or may be provided directly by OWRB.
- Redwood Posts shall be 4" x 4" x 10' buried securely a minimum of 3 feet below ground.
- Sign face shall be constructed of 3/4" x 4' x 6' – 5 ply Dura-plywood board & mounted to Posts with four (4) 5/8" x 6" Carriage Bolts.



Division 01
General Requirements

01 11 00 SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

- A. Construct Work as described in the Contract Documents.
 - 1. Provide the materials, equipment, and incidentals required to make the Project completely and fully operable.
 - 2. Provide the labor, equipment, tools, and consumable supplies required for a complete Project.
 - 3. Provide the civil, architectural, structural, mechanical, electrical, instrumentation, and all other Work required for a complete and operable Project.
 - 4. Test and place the completed Project in operation.
 - 5. Provide the special tools, spare parts, lubricants, supplies, or other materials as indicated in the Contract Documents for the operation and maintenance of the Project.
 - 6. The Contract Documents do not indicate or describe all Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the Construction Manager.

1.02 DESCRIPTION OF WORK

- A. Work is described in general, non-inclusive terms as:
 - 1. Replacement of approximately 1,100 feet of 2-inch and 4-inch water line to 8" HDPE and related appurtenances in the same corridors that runs along Scott Street and N. Minnesota Ave.
 - 2. Surface restoration including sodding, pavement repair, and concrete driveway repair.

1.03 WORK UNDER OTHER CONTRACTS

- A. Owner has no knowledge of work, other than the Work included in this Contract, which may impact construction scheduling, testing, and startup.

1.04 WORK BY OWNER

- A. Owner has no knowledge of work, other than the Work included in this Contract that may impact construction scheduling, testing, and startup.
- B. Owner will provide normal operation and maintenance of the existing facilities during construction, unless otherwise stated.

1.05 CONSTRUCTION OF UTILITIES

- A. Existing utilities will be used for this Project.

PART 2 - PRODUCTS (NOT USED)
PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 23 10 ALTERNATES AND ALLOWANCES

PART 1 - GENERAL

1.01 SUMMARY

A. Alternates:

1. This Section describes each alternate by number and describes the basic changes to be incorporated into the Work when this alternate is made a part of the Work in the Agreement.
2. The Drawings and Specifications will outline the extent of Work to be included in the alternate Contract Price.
3. Coordinate related Work and modify surrounding Work as required to properly integrate the Work under each alternate, and provide a complete and functional Project as required by the Contract Documents.
4. Alternate Bids or Proposals may be accepted or rejected at the option of the Owner.
5. Owner may incorporate these alternates in the Contract when executed, or may issue a Change Order to incorporate these alternates within 120 days of the opening of Contractor's Bid or Proposal at the prices offered in the Contractor's Bid or Proposal, unless noted otherwise. A Request for a Change Proposal may be issued after 120 days or other designated time period to negotiate a new price for incorporating the Work into the Project.

B. Allowances:

1. Include the specified allowance amounts in the Contract Price.
2. The amount of each allowance includes:
 - a. The cost of the product to the Contractor less any applicable trade discounts;
 - b. Delivery to the Site; and
 - c. Applicable taxes.
3. Include in the Contract Price all costs for:
 - a. Handling at the Site, including unloading, uncrating, and storage per Section 01 31 00 "Project Management and Coordination."
 - b. Cost for labor and equipment for installation and finishing.
 - c. Cost for related products not specifically listed in the allowance required for installation, including consumable supplies and materials.
 - d. All overhead, profit, and related costs.
4. Assist Owner in the selection of products.
 - a. Identify qualified Suppliers.
 - b. Obtain bids or proposals from qualified Suppliers.

- c. Present available alternates to the Owner through the Construction Manager. Notify Construction Manager of:
 - 1) Any objections to a particular Supplier or product.
 - 2) Effect on the construction schedule anticipated by the selection of each option.
 - 3) Cost of each option.
- 5. Upon selection of the product:
 - a. Purchase and install the product.
 - b. Contractor's responsibilities for products will be the same as for products selected by the Contractor.
- 6. Submit a Change Proposal per Section 01 26 00 "Change Management" to adjust the Contract Price if the net cost of the product is more or less than the specified amount.
 - a. Adjust the unit cost applied to the quantities installed per the method of payment described in Section 01 29 00 "Application for Payment Procedures" for products specified as Unit Price Work.
 - b. Do not perform Work until selection of alternate has been approved by the Owner.
 - c. Provide actual invoices for the materials.

1.02 DOCUMENTATION

- A. Provide documents for materials furnished as part of each alternate in accordance with Section 01 33 00 "Document Management."

1.03 DESCRIPTION OF ALLOWANCES

- A. Item B-1 – Landscaping Restoration
 - 1. Measurement and payment shall be at the unit price per dollar through an approved invoice. Contractor must submit a proposal for the work and obtain approval by the owner prior to the commencement of the work. An approved invoice plus a 5% markup will be considered full compensation for replacement of existing landscape on the Barnes property that must be replaced in kind to existing condition. The cost of all materials, excavation, planting, topsoil backfill, mulch, fertilizer, watering, pruning and other incidental items necessary to remove and replace all landscape on the Barnes property are included in this item.

1.04 DESCRIPTION OF ALTERNATES

A. No alternates will be provided with this Project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 26 00 CHANGE MANAGEMENT

PART 1 - GENERAL

1.01 REQUESTS FOR CHANGE PROPOSAL

- A. Construction Manager will initiate Modifications by issuing a Request for Change Proposal (RCP).
 - 1. Construction Manager and Design Professional will prepare a description of proposed Modifications.
 - 2. Construction Manager will issue the Request for Change Proposal form to Contractor. A number will be assigned to the Request for a Change Proposal when issued.
 - 3. Return a Change Proposal in accordance with Paragraph 1.02 for evaluation by the OPT.

1.02 CHANGE PROPOSALS

- A. Submit a Change Proposal (CP) to the Construction Manager for Contractor initiated changes in the Contract Documents or in response to a Request for Change Proposal. Submit the Change Proposal and attach the forms provided by the Construction Manager.
 - 1. Use the Change Proposal form provided by the Construction Manager.
 - 2. Include with the Change Proposal:
 - a. A complete description of the proposed Modification if Contractor initiated or proposed changes to the OPT's description of the proposed Modification.
 - b. The reason the Modification is requested, if not in response to a Request for a Change Proposal.
 - c. A detailed breakdown of the cost of the change if the Modification requires a change in Contract Price. The itemized breakdown is to include:
 - 1) List of materials and equipment to be installed;
 - 2) Man hours for labor by classification;
 - 3) Equipment used in construction;
 - 4) Consumable supplies, fuels, and materials;
 - 5) Royalties and patent fees;
 - 6) Bonds and insurance;
 - 7) Overhead and profit;
 - 8) Field office costs;
 - 9) Home office cost; and
 - 10) Other items of cost.
 - d. Provide the level of detail outlined in the paragraph above for each Subcontractor or Supplier actually performing the Work if Work is to be provided by a

Subcontractor or Supplier. Indicate appropriate Contractor mark ups for Work provided through Subcontractors and Suppliers. Provide the level of detail outlined in the paragraph above for self-performed Work.

- e. Submit Change Proposals that comply with the General Conditions for Cost of Work.
 - f. Provide a revised schedule. Show the effect of the change on the Project Schedule and the Contract Times.
- B. Submit a Change Proposal to the Construction Manager to request a Field Order.
 - C. A Change Proposal is required for all substitutions or deviations from the Contract Documents.
 - D. Request changes to products in accordance with Section 01 33 02 "Shop Drawings."

1.03 CONSTRUCTION MANAGER WILL EVALUATE THE REQUEST FOR A MODIFICATION

- A. Construction Manager will issue a Modification per the General Conditions if the Change Proposal is acceptable to the Owner. Construction Manager will issue a Change Order or Contract Amendment for any changes in Contract Price or Contract Times.
 - 1. Change Orders and Contract Amendments will be sent to the Contractor for execution with a copy to the Owner recommending approval. A Work Change Directive may be issued if Work needs to progress before the Change Order or Contract Amendment can be authorized by the Owner.
 - 2. Work Change Directives, Change Orders, and Contract Amendments can only be approved by the Owner.
 - a. Work performed on the Change Proposal prior to receiving a Work Change Directive or approval of the Change Order or Contract Amendment is performed at the Contractor's risk.
 - b. No payment will be made for Work on Change Orders or Contract Amendments until approved by the Owner.
- B. Contractor may be informed that the Change Proposal is not approved and construction is to proceed in accordance with the Contract Documents.

1.04 EQUAL NON-SPECIFIED PRODUCTS

- A. The products of the listed manufacturers are to be furnished where the Specifications list several manufacturers and do not specifically list "or equal" or "or approved equal" products. Use of any products other than those specifically listed is a substitution. Follow the procedures in Paragraph 1.05 for a substitution.
- B. Contractor may submit other manufacturers' products that are in full compliance with the Specifications where Specifications list one or more manufacturers followed by the phrase "or equal" or "or approved equal."
 - 1. Submit a Shop Drawing as required by Section 01 33 02 "Shop Drawings" to document that the proposed product is equal or superior to the specified product.

2. Prove that the product is equal. It is not the OPT's responsibility to prove the product is not equal.
 - a. Indicate on a point-by-point basis for each specified feature that the product is equal to the Contract Document requirements.
 - b. Make a direct comparison with the specified manufacturer's published data sheets and available information. Provide this printed material with the Shop Drawing.
 - c. The decision of the Design Professional regarding the acceptability of the proposed product is final.
3. Provide a certification that, in furnishing the proposed product as an equal, the Contractor:
 - a. Has thoroughly examined the proposed product and has determined that it is equal or superior in all respects to the product specified.
 - b. Has determined that the product will perform in the same manner and result in the same process as the specified product.
 - c. Will provide the same warranties and/or bonds as for the product specified.
 - d. Will assume all responsibility to coordinate any modifications that may be necessary to incorporate the product into the construction and will waive all claims for additional Work which may be necessary to incorporate the product into the Project which may subsequently become apparent.
 - e. Will maintain the same time schedule as for the specified product.
- C. A Change Proposal is not required for any product that is in full compliance with the Contract Documents. If the product is not in full compliance, it may be offered as a Substitution.

1.05 SUBSTITUTIONS

- A. Substitutions are defined as any product that the Contractor proposes to provide for the Project in lieu of the specified product. Submit a Change Proposal per Paragraph 1.02 along with documents required for a Shop Drawing as required by Section 01 33 02 "Shop Drawings" to request approval of a substitution.
- B. Prove that the product is acceptable as a substitute. It is not the Design Professional's responsibility to prove the product is not acceptable as a substitute.
 1. Indicate on a point-by-point basis for each specified feature that the product is acceptable to meet the intent of the Contract Documents requirements.
 2. Make a direct comparison with the specified Suppliers published data sheets and available information. Provide this printed material with the Shop Drawing.
 3. The decision of the Design Professional regarding the acceptability of the proposed substitute product is final.

- C. Provide a certification that, in making the substitution request, the Contractor:
 - 1. Has determined that the substituted product will perform in substantially the same manner and result in the same ability to meet the specified performance as the specified product;
 - 2. Will provide the same warranties and/or bonds for the substituted product as specified or as would be provided by the manufacturer of the specified product;
 - 3. Will assume all responsibility to coordinate any modifications that may be necessary to incorporate the substituted product into the Project and will waive all claims for additional Work which may be necessary to incorporate the substituted product into the Project which may subsequently become apparent; and
 - 4. Will maintain the same time schedule as for the specified product.
- D. Pay for review of substitutions in accordance with Section 01 33 02 "Shop Drawings."

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 29 00 APPLICATION FOR PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. Submit Applications for Payment for completed Work and for materials and equipment in accordance with the General Conditions, the Supplementary Conditions, the Agreement, and this Section. The Contract Price is to include costs for:
 - 1. Providing the Work in accordance with the Contract Documents;
 - 2. Installing Owner furnished equipment and materials, if any;
 - 3. Providing Work for alternates and allowances, if any;
 - 4. Providing Work for extra work items, if any and if authorized
 - 5. Commissioning, startup, training, and initial maintenance and operation;
 - 6. Acceptance testing at the manufacturer's facilities or at the Site;
 - 7. All home office overhead costs and expenses, including profit made directly or indirectly from the Project;
 - 8. Project management, contract administration, and field office and field operations staff including supervision, clerical support, and technology system support;
 - 9. Professional services including design fees, legal fees, and other professional services;
 - 10. Bonds and insurance;
 - 11. Permits, licenses, patent fees, and royalties;
 - 12. Taxes;
 - 13. Providing all documentation and Samples required by the Contract Documents;
 - 14. Facilities and equipment at the Site including:
 - a. Field offices, office furnishings, and all related office supplies, software, and equipment,
 - b. Storage facilities for Contractor's use and storage facilities for stored materials and equipment including spare parts storage,
 - c. Shops, physical plant, construction equipment, small tools, vehicles, and technology and telecommunications equipment,
 - d. Safety equipment and facilities to provide safe access and working conditions for workers and for others working at the Site,
 - e. Temporary facilities for power and communications,
 - f. Potable water and sanitation facilities, and
 - g. Mobilization and demobilization for all these facilities and equipment.
 - 15. Products, materials, and equipment stored at the Site or other suitable location in accordance with Section 01 31 00 "Project Management and Coordination";

16. Products, materials, and equipment permanently incorporated into the Project;
 17. Temporary facilities for managing water including facilities for pumping, storage, and treatment as required for construction and protection of the environment;
 18. Temporary facilities for managing environmental conditions and Constituents of Concern;
 19. Temporary facilities such as sheeting, shoring, bracing, formwork, embankments, storage facilities, working areas, and other facilities required for construction of the Project;
 20. Temporary and permanent facilities for protection of all overhead, surface, or underground structures or features;
 21. Temporary and permanent facilities for removal, relocation, or replacement of any overhead, surface, or underground structures or features;
 22. Products, materials, and equipment consumed during the construction of the Project;
 23. Contractor labor and supervision to complete the Project including that provided through Subcontractors or Suppliers;
 24. Correcting Defective Work during the Contract Times, during the Correction Period, or as required to meet any warranty provision of the Contract Documents;
 25. Risk associated with weather and environmental conditions, startup, and initial operation of facilities including equipment, processes, and systems;
 26. Contractor safety programs, including management, administration, and training;
 27. Maintenance of facilities including equipment, processes, and systems until operation is transferred to Owner;
 28. Warranties, extended or special warranties, or extended service agreements;
 29. Cleanup and disposal of any and all surplus materials; and
 30. Demobilization of all physical, temporary facilities not incorporated into the Project.
- B. Include the cost not specifically set forth as an individual payment item but required to provide a complete and functional system in the Contract Price.
 - C. Provide written approval of the surety company providing performance and payment bonds for the Schedule of Values, Application for Payment form, and method of payment prior to submitting the first Application for Payment. Submit approval using the "Consent of Surety Company to Payment Procedures" form provided by the Construction Manager. Payment will not be made without this approval.
 - D. Construction Manager may withhold processing the Applications for Payment if any of the following processes or documentation is not up to date:
 1. Progress Schedule per Section 01 33 05 "Construction Progress Schedule."
 2. Project videos and photographs per Section 01 33 06 "Graphic Documentation."
 3. Record Documents per Section 01 31 13 "Project Administration."

1.02 SCHEDULE OF VALUES

- A. Divide the Contract Price into an adequate number of line items to allow more accurate determination of the earned value for each line item when evaluating progress payments. Submit a detailed Schedule of Values for the Project at least 10 days prior to submitting the first Application for Payment using forms provided by the Construction Manager.
- B. Do not apply for payment until the Schedule of Values has been approved by the Construction Manager.
- C. Divide the cost associated with each line item in the Schedule of Values into installation and materials components.
 - 1. Installation cost is to include all cost associated with the line item except materials cost.
 - 2. Materials cost is the direct cost (as verified by invoice values) for products, materials, and equipment to be permanently incorporated into the Project associated with the line item.
 - 3. Installation cost is to include all direct costs and a proportionate amount of the indirect costs for the Work associated with each line item. Include costs not specifically set forth as an individual payment item but required to provide a complete and functional system.
 - 4. The sum of materials and installation costs for all line items must equal the Contract Price.
- D. Use each unit price line item in the Agreement as a line item in the Schedule of Values. The sum of materials and installation costs for each line item for unit price contracts must equal the value of the line item in the Agreement. In addition to the installation cost described in Paragraph 1.02.C.3, installation costs for unit price items are to include costs for waste and overages.
 - 1. Installation and materials cost may be left as a single installation component if:
 - a. Contractor does not intend to request payment for stored materials for that line item; or
 - b. Work in the line item will be completed within a single payment period.
 - 2. Provide adequate detail to allow a more accurate determination of the earned value for installation costs, expressed as a decimal fraction of Work completed, for each line item.
 - 3. Installation cost line items may not exceed \$50,000.00. Items that are not subdivided into smaller units may only be included in the Application for Payment when Work on the entire unit is complete.
 - 4. Lump sum items may be divided into an estimated number of units to estimate earned value. The estimated number of units times the cost per unit must equal the lump sum amount for that line item.
 - 5. Include Contractor's overhead and profit in the installation costs each line item in proportion to the value of the line item to the Contract Price.

6. Include cost not specifically set forth as an individual payment item but required to provide a complete and functional system in the Contract Price for each item.
 7. Line items may be used to establish the value of Work to be added or deleted from the Project.
- E. Include a breakdown of both mobilization and demobilization costs in the Schedule of Values. The total cost for both mobilization and demobilization may not exceed 5% percent of the total Contract Price. Payment for mobilization and demobilization will be based on the earned value of Work completed. Payment for these costs will only be made for Work completed for the following:
1. Bonds and insurance;
 2. Transportation and setup for equipment;
 3. Transportation and/or erection of all field offices, sheds, and storage facilities;
 4. Salaries for preparation of documents required before the first Application for Payment; and
 5. Salaries for field personnel directly related to the mobilization of the Project.

1.03 SCHEDULE OF ANTICIPATED PAYMENTS

- A. Submit a schedule of the anticipated Application for Payments showing the anticipated application numbers, submission dates, and the amount to be requested for each Application for Payment on the form provided by the Construction Manager.
- B. Update the schedule of anticipated payments as necessary to provide a reasonably accurate indication of the funds required to make payments each month to the Contractor for Work performed.

1.04 ALTERNATES, ALLOWANCES, AND EXTRA WORK ITEMS

- A. Include line items and amounts for specified alternate Work and allowances for Work in the Agreement, if any, and as described in Section 01 23 10 "Alternates and Allowances."
- B. Include line items and amounts for Extra Work items in the Agreement, if any, and as described in Section 01 29 01 "Measurement and Basis for Payment."

1.05 RETAINAGE AND SET-OFFS

- A. Retainage will be withheld from each Application for Payment per the Agreement.
- B. Reduce payments for set-offs per the General Conditions as directed by the Construction Manager.

1.06 PROCEDURES FOR SUBMITTING AN APPLICATION FOR PAYMENT

- A. Submit a draft Application for Payment to the Construction Manager each month at least 10 days before the date established in the Agreement for Owner to make progress payments. Do not submit Applications for Payment more often than monthly. Review the

draft Application for Payment with the Construction Manager to determine concurrence with:

1. Values requested for materials and equipment, stored or incorporated into the Project as documented by invoices;
 2. The earned value for installation costs for each line item in the Application for Payment form expressed as a percent complete for that line item;
 3. The quantity of Work completed for each unit price item;
 4. Amount of retainage to be withheld; and
 5. Set-offs included in the Application for Payment.
- B. Submit Applications for Payment to the Construction Manager after agreement has been reached on the draft Application for Payment with the Construction Manager.
- C. Provide all information requested in the Application for Payment form. Do not leave any blanks incomplete. If information is not applicable, enter "N/A" in the space provided.
1. Number each application sequentially and include the dates for the application period.
 2. Complete the "Contract Time Summary" section on the Application for Payment form. If the Final Completion date shows the Project is more than 30 days behind schedule, revise the Schedule of Anticipated Payments to correspond to the updated schedule required per Section 01 33 05 "Construction Progress Schedule."
 3. Complete the "Summary of Earned Value and Set-offs" section on the Application for Payment form. Show the total amounts for earned value of original Contract performed, earned value for Work on approved Contract Amendments and Change Orders, retainage and set-offs.
 4. Sign and date the Contractor's Certification on the Application for Payment form that all Work, including materials, covered by this Application for Payment have been completed or delivered and stored in accordance with the Contract Documents, that all amounts have been paid for Work, materials, and equipment for which previous Payment has been made by the Owner, and that the current payment amount shown in this Application for Payment is now due.
 5. Include "Attachment A - Tabulation of Earned Value of Original Contract Performed" to show the value of materials stored and successfully incorporated into the Project and the earned value for installation of the Work for each line item in the Application for Payment for Work. Attachment A includes Work on the original Contract Price and on approved Contract Amendments and Change Orders.
 6. Include "Attachment B - Tabulation of Values for Materials and Equipment" to track invoices used to support amounts requested as materials in Attachment A. Enter materials to show the amount of the invoice assigned to each item in Attachment A if an invoice includes materials used on several line items.
 7. Include "Attachment C - Summary of Set-offs" to document set-offs made per the Contract Documents. Show each set-off as it is applied. Show a corresponding line item to reduce the set-off amount if a payment held by a set-off is released for payment.

8. Include "Attachment D - Retainage Calculation" to show method for calculating retainage. The amount of retainage with respect to progress payments is stipulated in the Agreement. Any request for a reduction in retainage must be accompanied by a Consent of Surety to Reduction or Partial Release of Retainage.
 9. Include "Attachment E - EVA Calculation" and the EVA Chart showing the anticipated and actual total earned value of fees, Work, and materials. Create a graphic representation (curve) of the anticipated progress on the Project each month. Compare the anticipated cumulative total earned value of fees, Work, and materials to the actual total earned value of fees, Work, and materials to determine performance on budget and schedule. Adjust the table and curve to incorporate Modifications.
- D. Submit attachments in Portable Document Format (PDF).
1. Generate attachments to the Application for Payment using the Excel spreadsheet provided by the Construction Manager.
 2. Submit PDF documents with adequate resolution to allow documents to be printed in a format equivalent to the document original. Documents are to be scalable to allow printing on standard 8-1/2 x 11 or 11 x 17 paper.

1.07 ADJUSTMENTS TO THE SCHEDULE OF VALUES IN THE APPLICATION FOR PAYMENT

- A. Submit a Change Proposal to request any changes to the Schedule of Values incorporated into the Application for Payment once approved. A Field Order will be issued by the Construction Manager to modify the Application for Payment form if approved.
- B. Payment for materials and equipment shown in the Application for Payment will be made for the total of associated invoice amounts, up to the value shown for materials in the Application for Payment for that line item.
 1. If the total amount for invoices for materials and equipment for a line item are less than the amount shown for the materials component of that line item in the Application for Payment, and it can be demonstrated that no additional materials or equipment are required to complete Work described in that item, the difference between the total invoice for materials and equipment and the materials component for that line item can be added to the installation component of that Work item.
 2. Costs for material and equipment in excess of the value shown in the Schedule of Values may not be paid for under other line items.

1.08 CONSTRUCTION MANAGER'S RESPONSIBILITY

- A. Construction Manager will review each draft Application for Payment with Contractor to reach an agreement on the amount to be recommended to Owner for payment. Contractor is to revise the Application for Payment to incorporate changes, if any, resulting from this review process.
- B. Construction Manager will review the Application for Payment to determine that the Application for Payment has been properly submitted and is in accordance with the agreed to draft Application for Payment.
- C. Construction Manager will either recommend payment of the Application for Payment to Owner or notify the Contractor of the reasons for not recommending payment. Contractor

may make necessary corrections and resubmit the Application for Payment. Construction Manager will review resubmitted Application for Payment and reject or recommend payment of the Application for Payment to Owner as appropriate.

- D. Construction Manager's recommendation of the Application for Payment constitutes a representation that based on its experience and the information available:
 - 1. The Work has progressed to the point indicated;
 - 2. The quality of the Work is generally in accordance with the Contract Documents; and
 - 3. Requirements prerequisite to payment have been met.
- E. This representation is subject to:
 - 1. Further evaluation of the Work as a functioning whole;
 - 2. The results of subsequent tests called for in the Contract Documents; or
 - 3. Any other qualifications stated in the recommendation.
- F. Construction Manager does not represent by recommending payment that:
 - 1. Inspections made to check the quality or the quantity of the Work as it was performed were exhaustive or extended to every aspect of the Work in progress; or
 - 2. Other matters or issues that might entitle Contractor to additional compensation or entitle Owner to withhold payment to Contractor exist.
- G. Neither Construction Manager's review of Contractor's Work for the purposes of recommending payments nor Construction Manager's recommendation of payment imposes responsibility on the Construction Manager or Owner:
 - 1. To supervise, direct, or control the Work;
 - 2. For the means, methods, techniques, sequences, or procedures of construction, or safety precautions and programs;
 - 3. For Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - 4. To make examinations to ascertain how or for what purposes Contractor has used the monies paid on account of the Contract Price; or
 - 5. To determine that title to the Work, materials, or equipment has passed to Owner free and clear of Liens.

1.09 FINAL APPLICATION FOR PAYMENT

- A. Include adjustments to the Contract Price in the final Application for Payment for:
 - 1. Approved Change Orders and Contract Amendments;
 - 2. Allowances not previously adjusted by Change Order;
 - 3. Deductions for Defective Work that have been accepted by the Owner;
 - 4. Penalties and bonuses;
 - 5. Deduction for all final set-offs; and

6. Other adjustments if needed.
- B. Construction Manager will prepare a final Change Order reflecting the approved adjustments to the Contract Price which have not been covered by previously approved Change Orders and, if necessary, to reconcile estimated unit price quantities with actual quantities.
- C. Submit the final Application for Payment per the General Conditions, including the final Change Order. Provide the following with the final Application for Payment:
 1. Evidence of payment or release of Liens on the forms provided by the Construction Manager and as required by the General Conditions.
 2. Consent from surety to final payment.
- D. Final payment will also require additional procedures and documentation per Section 01 70 00 "Execution and Closeout Requirements."

1.10 PAYMENT BY OWNER

- A. Owner is to pay the amount recommended for monthly payments within 30 days after receipt of the Construction Manager's recommended Application for Payment.
- B. Final payment may take longer than 30 days since Owner's council must approve final payment.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 29 01 MEASUREMENT AND BASIS FOR PAYMENT

PART 1 - GENERAL

1.01 PAYMENT FOR MATERIALS AND EQUIPMENT

- A. Payment will be made for materials and equipment materials properly stored and successfully incorporated into the Project less the specified retainage.
- B. Provide a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of Liens. Provide documentation of payment for materials and equipment with the next Application for Payment. Remove items from the tabulation of materials and equipment if this documentation is not provided with the next Application for Payment.
- C. Provide evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest.
- D. The Work covered by progress payments becomes the property of the Owner at the time of payment. The Contractor's obligations with regard to proper care and maintenance, insurance, and other requirements are not changed by this transfer of ownership until final acceptance in accordance with the General Conditions.
- E. Payment for materials and equipment does not constitute acceptance of the product.

1.02 MEASUREMENT AND BASIS FOR PAYMENTS ON LUMP SUM ITEMS

- A. Measurement for progress payments is the invoice value for stored materials and the earned value for all other cost for constructing each item. Earned value is expressed as the value of the Work completed divided by the total value of installation cost. The total amount paid will be equal to the total lump sum amount for that item.

1.03 MEASUREMENT AND BASIS FOR PAYMENTS ON UNIT PRICE ITEMS

- A. Measure the Work using the unit of measure indicated in this Section for each unit price line item. Payment will be made only for the actual measured unit and/or computed length, area, solid contents, number, and weight unless other provisions are made in the Contract Documents. Payment on a unit price basis will not be made for Work outside dimensions shown in the Contract Documents.
- B. Payment will be made for the actual quantity of Work completed and for materials and equipment stored during the payment period. Payment amount is the Work quantity measured per Paragraph A above multiplied by the unit price for that line item in the Agreement.

1.04 MEASUREMENT AND BASIS FOR PAYMENT FOR BASE ITEMS

- A. Items 1 – 8" HDPE WATER LINE, DR11 BY OPEN CUT:
 - 1. Measurement for pipe shall be per linear foot of pipe installed by open cut for the nominal diameter and at the pressure classes shown on the Contract Drawings, measured horizontally from center of fitting to center of fitting or end of pipe without any deduction for the length of intermediate fittings, specials, or valves. No additional

payment will be made for vertical lengths of pipe. Payment shall not be made for a different class unless the Owner approves a different class.

2. Payment made at the unit price bids shall include furnishing, hauling and laying of pipe shown on the plans, fusing of joints, pumping where necessary, trench excavation, and backfilling, including embedment and backfill material as specified, surface restoration, disposal of surplus materials, cleaning up maintenance and trench safety be full compensation for trench safety as outlined in the Contract Documents, any incidental work and materials not otherwise provided for these specifications, all in strict accordance with the plans and specifications.
3. Payment shall not be made for costs required to have utility companies repair any damage inflicted to their lines by the Contractor and any cleanup, property damages, fines, etc. resulting from damage inflicted to any utility line by the Contractor.
4. Trench safety

B. Item 2 – 14” STEEL CASING BY TRENCHLESS:

1. Boring, jacking or tunneling pipe will be measured by the linear foot of pipe, complete in place. Such measurement will be made between the ends of the pipe along the central axis as installed. The work performed and materials furnished as prescribed by this item will be paid for at the total unit price bid per linear foot for Boring, Jacking or Tunneling Pipe, of the type, size, and class specified on the plans, which price shall be full compensation for furnishing all materials, liner materials required for tunnel operations, for all preparation, hauling and installing of same, and for all labor, tools, equipment and incidentals necessary to complete the work, including excavation, shoring of entry/exit pits, backfilling and disposal of surplus material.
2. The contract total unit price shall be the total compensation for furnishing and placing all materials including encasement pipe, carrier pipe, concrete embedment or grout backfill, concrete, clay or brick plugs, and for all labor, equipment and materials as required to complete the installation.

C. Item 3 – 8” GATE VALVE, AWWA:

1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the gate valves for a complete installation in accordance with the Contract Drawings.

D. Item 4 – 8”X8” TAPPING SLEEVE AND VALVE

1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the tapping sleeve and valve for a complete installation in accordance with the Contract Drawings.

2. This unit price pay item shall include furnishing all labor, equipment, and materials necessary to install the fitting as shown in the plans, standard details, and specifications. The cost of the fitting, hardware, and all other incidental items necessary for a complete and workable installation are included in this pay item.
- E. Item 5 – 8"X6" TEE:
1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the fitting, glands, nuts and bolts, and thrust restraint for a complete installation in accordance with the Contract Drawings.
 2. This unit price pay item shall include furnishing all labor, equipment, and materials necessary to install the fitting as shown in the plans, standard details, and specifications. The cost of the fitting, hardware, and all other incidental items necessary for a complete and workable installation are included in this pay item.
- F. Item 6 – 8" 90° BEND:
1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the fitting, glands, nuts and bolts, and thrust restraint for a complete installation in accordance with the Contract Drawings.
 2. This unit price pay item shall include furnishing all labor, equipment, and materials necessary to install the fitting as shown in the plans, standard details, and specifications. The cost of the fitting, hardware, and all other incidental items necessary for a complete and workable installation are included in this pay item.
- G. Item 7 – 45° 8" BEND:
1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the fitting, glands, nuts and bolts, and thrust restraint for a complete installation in accordance with the Contract Drawings.
 2. This unit price pay item shall include furnishing all labor, equipment, and materials necessary to install the fitting as shown in the plans, standard details, and specifications. The cost of the fitting, hardware, and all other incidental items necessary for a complete and workable installation are included in this pay item.
- H. Item 8 – FIRE HYDRANT ASSEMBLY, INCL. ISOLATION VALVE:
1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the valve, fitting, glands, nuts and bolts, and thrust restraint for a complete installation in accordance with the Contract Drawings.
 2. This item shall include furnishing materials necessary to install a fire hydrant assembly complete as shown in the plans, standard details, and specifications. DIP fittings and valves shall be fusion-bonded epoxy coated and have MJ connections with high-strength low-alloy steel nuts and bolts coated with blue Xylan 1424 fluoropolymer. The cost of all pipe, valves, fittings bedding backfill, thrust blocking, and all other incidental items necessary for a complete and workable installation are included in this item.
- I. Item 9 – NEW LONG SIDE WATER SERVICE BY TRENCHLESS:
1. Measurement and payment shall be per each long side water service connection installed. The contractor shall install all new long service connections by method of trenchless.

2. This item shall include furnishing all labor, equipment, and materials necessary to replace the existing service connection to the existing meter with a new meter box as shown in the plans, standard details, and specifications. The cost of any necessary meter box, meter box relocations, pipe, valves, fittings bedding backfill, thrust blocking, surface restoration, bell holes and all other incidental items necessary for a complete and workable installation are included in this item.
- J. Item 10 – NEW SPECIALTY WATER SERVICE
1. Measurement and payment shall be per each specialty water service connection installed. The contractor shall install all specialty service connections by method of trenchless.
 2. This item shall include furnishing all labor, equipment, and materials necessary to replace the existing service connection to the existing or relocated meter box as shown in the plans, standard details, and specifications. The cost of any necessary meter box relocations, pipe, valves, fittings bedding backfill, thrust blocking, surface restoration, bell holes and all other incidental items necessary for a complete and workable installation are included in this item.
 3. Contractor shall cut into steel casing to make service connections. Contractor shall use aggregate backfill under roadway.
- K. Item 11 – LEAD SERVICE LINE REMOVAL AND DISPOSAL:
1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for removal and disposal of lead service lines abiding by all requirements and recommendation by ODEQ and any local governing authority.
- L. Item 12 – BLOCK SODDING:
1. Measurement for block sodding shall be per square yard of block sodding.
 2. This item shall include furnishing all materials, labor, and equipment to supply and properly apply slab sod in disturbed areas in accordance with the plans, standard details, and specifications. The cost of salvaging and placing topsoil, ground preparation, watering, fertilizing, slab sod to match grass type at each individual location, and all other incidental items necessary to establish quality grass turf are included in this pay item. Any slab sodding required in excess of the estimated quantity shall be incidental to the project.

M. Item 13 – CLEARING AND GRUBBING:

1. This unit price item shall include furnishing all materials, labor, and equipment necessary to remove and dispose of all vegetation, trees, protruding objects, structures, and other appurtenances necessary to prepare the area for the proposed construction. Cost of debris disposal, subgrade preparation, and all other incidental items necessary for a complete and workable installation are included in this pay item.

N. Item 14 – HYDROSTATIC TESTING AND DISINFECTION:

1. Measuring for payment is on a lump sum basis. Payment will be based on the earned value of Work completed.
2. This item shall include furnishing all materials, labor, and equipment to perform hydrostatic testing and disinfection for the new waterline in accordance with the plans, standard details, and specifications. The cost of other incidental items related to the testing and disinfection of waterlines are included in this lump sum pay item.

O. Item 15 – PREPARE AND IMPLEMENT SWPPP:

1. This lump sum pay item shall include furnishing all materials, labor, and equipment to design, install, and maintain an approved erosion control plan and Storm Water Pollution Prevention Plan for the project area. This item shall include the cost for all permits including filing the Notice of Intent (NOI) and the Notice of Termination (NOT) with the Oklahoma Department of Environmental Quality (ODEQ). The temporary erosion control plan must be approved, and measures installed prior to any construction. This item also includes ongoing maintenance of measures during construction (such as maintaining construction entrances), removing temporary erosion control measures at project completion, removing all existing sediment from culverts, and re-establishing the flowlines of the upstream and downstream drainage ditches within the project area. No exceptions will be made to the lump sum price established by the Contractor.

P. Item 16 – TRAFFIC CONTROL:

1. All signs, barricades, warning lights, and other traffic control devices used for construction traffic control shall be measured as a lump sum. Accepted signs, barricades, warning lights, and other traffic control devices used for construction traffic control will be paid for at the contract price. Which shall be full compensation for furnishing all materials, equipment, labor, and incidentals necessary to complete the work as specified.
2. The items measured as provided above will be paid for at the contract unit price bid: CONSTRUCTION SIGNING AND TRAFFIC CONTROL L.S.
Such payment shall be compensation in full for furnishing all materials, labor, equipment, tools and incidentals, and for performing the work in accordance with these specifications.

Q. Item 17 – PROJECT SIGN

1. Measurement and payment shall be at the unit price bid per each and shall be full compensation for furnishing and installing the project signage for a complete installation in accordance with the Contract Drawings.

R. Item 18 – CUT AND PLUG EXISTING WATER LINE

1. Measurement and payment for cut and plug of existing water line pipe shall be per each installed.
2. This item shall include furnishing all labor, equipment, and materials necessary to cut and plug the existing pipe as shown in the plans, standard details, and specifications. All necessary ductile iron fittings shall be fusion-bonded epoxy coated, polyethylene encased, and have MJ connections with high-strength low-alloy steel nuts and bolts coated with blue Xylan 1424 fluoropolymer. The cost of the pipe, fittings, hardware, thrust restraint and all other incidental items necessary for a complete and workable installation are included in this pay item. Pavement repair and traffic control is not included in this item. No additional payment shall include all costs required to have utility companies repair any damage inflicted to their lines by the Contractor and any cleanup, property damages, fines, etc. resulting from damage inflicted to any utility.

S. Item 19 – CELLULAR CONCRETE FILL AND ABANDONED LINES:

1. Measurement and payment shall be at the unit price of per cubic yard and shall be full compensation for the filling and complete closure of abandoned lines.
2. The unit price pay item shall include furnishing all labor, equipment, and materials necessary to abandon the existing lines with cellular concrete as shown in the plans, standard details, and specifications. The cost of the existing water line abandonment, existing fire hydrant removal, labor, and all other incidental items necessary for a complete and workable installation are included in this pay item.

T. Item 20 and 21 – CONCRETE PAVEMENT REPAIR AND CONCRETE DRIVEWAY REPAIR:

1. Measurement for concrete pavement shall be per square yard of concrete pavement.
2. Payment for concrete pavement shall be made at the unit price bid per square yard as shown in the Contract Drawings and shall be full compensation for furnishing and installing concrete pavement to the limits shown in the Contract Drawings. This unit price item shall include concrete, reinforcing, special backfill, subgrade stabilization, doweling into existing pavement, removal of existing concrete, joints, replacement of existing pavement markings, traffic signage or signal restoration not included in other bid items, access entrance/transitions and all other items required. No additional payment will be made for additional concrete pavement replacement for paving damaged by Contractor's operations outside those limits shown on the Contract Drawings.

U. Item 22 – ASPHALT PAVEMENT REPAIR:

1. Measurement for asphalt pavement shall be per square yard of asphalt pavement.
2. This unit price item shall include furnishing all materials, labor, and equipment to properly remove and replace the existing asphalt pavement in accordance with the plans, standard details, and specifications. The cost of asphalt and concrete removal and disposal, ODOT Class A aggregate backfill and base, subgrade preparation, compaction, concrete, asphalt, reinforcement, striping and all other incidental items necessary for a complete and workable installation.

V. Item 23 – GRAVEL DRIVEWAY REPAIR:

1. Measurement for gravel driveway shall be per square yard of asphalt pavement.
2. This unit price item shall include furnishing all materials, labor, and equipment to properly remove and replace the existing asphalt pavement in accordance with the plans, standard details, and specifications. The cost of asphalt and concrete removal and disposal, ODOT Class A aggregate backfill and base, subgrade preparation, compaction, concrete, asphalt, reinforcement, striping and all other incidental items necessary for a complete and workable installation.

W. Item 24 – 8" CORRUGATED METAL CULVERT REPLACEMENT:

1. The removal and replacement, complete in place, of culvert shall be measured by the linear foot and paid for at the Total Unit Price shown in the bid proposal.
2. This item shall include furnishing all materials, labor, and equipment to perform the removal and replacement of driveway culvert. Culverts shall be replaced to similar size, material, and elevation as shown in the drawings. All swale flowlines and bank slopes are to be restored to the existing operating grade.

X. Item 25 – MOBILIZATION:

1. Measuring for payment is on a lump sum basis. Payment for mobilization will be based on the earned value of Work completed.
2. Include the following costs in this bid item:
 - a. Bonds and insurance;
 - b. Transportation and setup for equipment;
 - c. Transportation and/or erection of all field offices, sheds and storage facilities;
 - d. Salaries for preparation of documentation required before the first Application for Payment;
 - e. Salaries for field personnel assigned to the Project related to the mobilization of the Project; and

- f. Mobilization may not exceed 5 percent of the total Contract Price.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 31 00 PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

- A. Furnish resources required to complete the Project in accordance with the Contract Documents and within the Contract Times.
- B. Construct Project in accordance with current safety practices.
- C. Manage Site to allow access to Site and control construction operations.
- D. Construct temporary facilities to provide and maintain control over environmental conditions at the Site. Remove temporary facilities when no longer needed.
- E. Provide temporary controls for pollution, management of water, and management of excess earth as required in Section 01 57 00 "Temporary Controls."

1.02 STANDARDS

- A. Perform Work to comply with:
 - 1. Requirements of the Contract Documents;
 - 2. Laws and Regulations; and
 - 3. Specified industry standards.

1.03 DOCUMENTATION

- A. Provide documents in accordance with Section 01 33 00 "Document Management."
- B. Provide copies of Supplier's printed storage instructions prior to furnishing materials or products and installation instructions prior to beginning the installation.
- C. Incorporate field notes, sketches, recordings, and computations made by the Contractor in Record Drawings per Section 01 31 13 "Project Administration."

1.04 PERMITS

- A. Obtain building permits for the Project from the local authorities having jurisdiction. Pay building permit fees and include these costs in the Contract Price.
- B. Obtain environmental permits required for construction at the Site.
- C. Provide required permits for transporting heavy or oversized loads.
- D. Provide other permits required to conduct any part of the Work.
- E. Arrange for inspections and certification by agencies having jurisdiction over the Work and include the cost for these inspections and certifications in the Contract Price.
- F. Make arrangements with private utility companies and pay fees associated with obtaining services or inspections.
- G. Retain copies of permits and licenses at the Site and comply with all regulations and conditions of the permit or license.

1.05 SAFETY REQUIREMENTS

- A. Manage safety to protect the safety and welfare of persons at the Site.
- B. Provide safe access to move through the Site. Provide protective devices to warn and protect from hazards at the Site.
- C. Provide safe access for those performing tests and inspections.
- D. Maintain a supply of personal protective equipment for visitors to the Site.
- E. Comply with latest provisions of the Occupational Health and Safety Administration (OSHA) and other Laws and Regulations.
- F. Cooperate with accident investigations. Provide two copies of all reports, including insurance company reports, prepared concerning accidents, injuries, or deaths related to the Project to the Construction Manager as Record Data per Section 01 31 13 "Project Administration."

1.06 ACCESS TO THE SITE

- A. Maintain access to the facilities at all times. Do not obstruct roads, pedestrian walks, or access to the various buildings, structures, stairways, or entrances. Provide safe access for normal operations during construction.
- B. Provide adequate and safe access for inspections. Leave ladders, bridges, scaffolding, and protective equipment in place until inspections have been completed. Construct additional safe access if required for inspections.
- C. Use roadways for construction traffic only with written approval of the appropriate representatives of each entity. Roadways may not be approved for construction traffic. Obtain written approval to use roads to deliver heavy or oversized loads to the Site. Furnish copies of the written approvals to the Construction Manager as Record Data per Section 01 31 13 "Project Administration."

1.07 CONTRACTOR'S USE OF THE SITE

- A. Limit the use of Site for Work and storage to those areas designated on the Drawings or approved by the Construction Manager. Coordinate the use of the Site with the Construction Manager.
- B. Provide security at the Site as necessary to protect against vandalism and loss by theft.
- C. Park construction equipment in designated areas only and provide spill control measures as discussed in Section 01 57 00 "Temporary Controls."
- D. Park employees' vehicles in designated areas only.
- E. Obtain written permission of the property owner before entering privately-owned land outside of the Owner's property, rights-of-way, or easements.
- F. Cooperate with public and private agencies with facilities operating within the limits of the Project. Provide 48 hours' notice to any applicable agency when Work is anticipated to proceed in the vicinity of any facility by using Oklahoma's One-Call System, OKIE811 at 1-800-522-OKIE.

G. Conduct of Contractor's or Subcontractor's Employees:

1. Do not permit alcoholic beverages or illegal substances on the Site. Do not allow persons under the influence of alcoholic beverages or illegal substances to enter or remain on the Site at any time. Persons on Site under the influence of alcoholic beverages or illegal substances will be permanently prohibited from returning to the Site. Criminal or civil penalties may also apply.
2. Do not allow the use of offensive language or sexual harassment in any form. These actions will cause immediate and permanent removal of the offender from the premises. Criminal or civil penalties may apply.
3. Require workers to wear clothing that is inoffensive and meets safety requirements. Do not allow sleeveless shirts, shorts, or any exceedingly torn, ripped, or soiled clothing to be worn on the Site.
4. Do not allow the use, possession, concealment, transportation, promotion, or sale of the following prohibited items anywhere on the Site:
 - a. Firearms (including air rifles and pistols and BB or pellet guns) and ammunition;
 - b. Bows, crossbows, arrows, bolts, or any other projectile weapons;
 - c. Explosives of any kind, including fireworks;
 - d. Illegal knives;
 - e. Other weapons prohibited by state Laws and Regulations; and
 - f. Any other item that has been designed or intended to be used as a weapon.

No exceptions will be made for the possession of a firearm by a person that has a valid state-issued license to carry a firearm. Remove any of the prohibited items listed above from the Site immediately and permanently. Any person found to be in possession of any prohibited item must also be removed from the Site and may be reported to local law enforcement.

1.08 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. Examine the Site and review the available information concerning the Site. Locate utilities, underground facilities, and existing structures. Verify the elevations of the structures adjacent to excavations. Report any discrepancies from information in the Contract Documents to the Construction Manager before beginning construction.
- B. Determine if existing structures, poles, piping, or other utilities at excavations will require relocation or replacement. Prepare a Plan of Action per Section 01 31 13 "Project Administration." Coordinate Work with local utility company and others for the relocation or replacement.
- C. Protect utilities, underground facilities and existing structures unless they are shown to be replaced or relocated on the Drawings. Restore damaged items to the satisfaction of the Owner and utility or property owner.
- D. Carefully support and protect all structures and/or utilities so that there will be no failure or settlement where excavation or demolition endangers adjacent structures and utilities. Do not take existing utilities out of service unless required by the Contract Documents or

approved by the Construction Manager. Notify and cooperate with the utility owner if it is necessary to move services, poles, guy wires, pipelines, or other obstructions.

- E. Protect existing trees and landscaping at the Site. Mark trees that may be removed during construction and review with the Construction Manager for approval before removing. Protect trees to remain from damage limiting activity, including stockpiling of materials within the drip line of the tree.
- F. Protect buildings from damage when handling material or equipment. Protect finished surfaces, including floors, doors, and jambs. Remove doors and install temporary wood protective coverings over jambs, if needed.

1.09 DISRUPTION TO SERVICES/CONTINUED OPERATIONS

- A. Owner's facilities are to continue in service as usual during the construction unless noted otherwise. Owner or utilities must be able to operate and maintain the facilities. Keep disruptions to existing utilities, piping, process piping, or electrical services to a minimum.
 - 1. Do not restrict access to critical valves, operators, or electrical panels.
 - 2. Do not store material or products inside structures unless authorized by the Construction Manager.
 - 3. Limit operations to the minimum amount of space needed to complete the specified Work.
 - 4. Maintain storm sewers and sanitary sewers in service at all times. Provide temporary service around the construction or otherwise construct the Work in a manner that flow is not restricted.
- B. Provide a Plan of Action in accordance with Section 01 35 00 "Special Procedures" if facilities must be taken out of operation.

1.10 FIELD VERIFICATION

- A. Perform complete field measurements prior to purchasing products or beginning construction for products required to fit existing conditions.
- B. Verify property lines, control lines, grades, and levels indicated on the Drawings.
- C. Verify pipe class, equipment capacities, existing electrical systems, and power sources for existing conditions.
- D. Check Shop Drawings and indicate the actual dimensions available where products are to be installed.
- E. Include field measurements in Record Documents as required in Section 01 31 13 "Project Administration."

1.11 REFERENCE DATA AND CONTROL POINTS

- A. Construction Manager will provide the following control points:
 - 1. Base line or grid reference points for horizontal control.
 - 2. Benchmarks for vertical control.

- B. Locate and protect control points prior to starting the Work and preserve permanent reference points during construction. Designated control points may be on an existing structure or monument. Do not change or relocate points without prior approval of the Construction Manager. Notify Construction Manager when a reference point is lost, destroyed, or requires relocation. Replace Project control points on the basis of the original survey. Control points or benchmarks damaged, disturbed or destroyed as a result of the Contractor's negligence will be restored by the Construction Manager. Owner will impose a set-off as compensation for the effort required.
- C. Provide complete engineering layout of the Work needed for construction.
 - 1. Provide competent personnel. Provide equipment including accurate surveying instruments, stakes, platforms, tools, and materials.
 - 2. Provide surveying with accuracy meeting the requirements established by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.
 - 3. Provide Record Data per Section 01 31 13 "Project Administration" and measurements per standards.

1.12 DELIVERY AND STORAGE

- A. Deliver products and materials to the Site in time to prevent delays in construction.
- B. Deliver packaged products to Site in original undamaged containers with identifying labels attached. Open cartons as necessary to check for damage and to verify invoices. Reseal cartons and store properly until used. Leave products in original packages or other containers until installed. If original packages or containers are damaged, repackage in containers and include packing slips, labels and other information from the original packaging.
- C. Deliver products that are too large to fit through openings to the Site in advance of the time enclosing walls and roofs are erected. Set in place, raised above floor on cribs or pallets.
- D. Assume full responsibility for the protection and safekeeping of products stored at the Site.
- E. Store products at locations acceptable to the Construction Manager and to allow Owner access to maintain and operate existing facilities.
- F. Store products in accordance with the Supplier's storage instructions immediately upon delivery. Leave seals and labels intact. Arrange storage to allow access for maintenance of stored items and for inspection. Store unpacked and loose products on shelves, in bins, or in neat groups of like items.
- G. Provide additional storage areas as needed for construction. Store products subject to damage by elements in substantial weather-tight enclosures or storage sheds. Provide and maintain storage sheds as required for the protection of products. Provide temperature, humidity control, and ventilation within the ranges stated in the Supplier's instructions. Remove storage facilities at the completion of the Project.
- H. Protect the pipe interior. Keep all foreign materials such as dirt, debris, animals, or other objects out of the pipe during the Work.
- I. Provide adequate exterior storage for products that may be stored out-of-doors.

1. Provide substantial platforms, blocking, or skids to support materials and products above ground which has been sloped to provide drainage. Protect products from soiling or staining.
 2. Cover products subject to discoloration or deterioration from exposure to the elements, with impervious sheet materials. Provide ventilation to prevent condensation below covering.
 3. Store loose, granular materials on clean, solid surfaces, or on rigid sheet materials, to prevent mixing with foreign matter.
 4. Provide surface drainage to prevent erosion and ponding of water.
 5. Prevent mixing of refuse or chemically injurious materials or liquids with stored materials.
 6. Pipes and conduits stored outdoors are to have open ends sealed to prevent the entrance of dirt, moisture, and other injurious materials. Protect PVC pipe from ultraviolet light exposure.
 7. Store products to prevent wind damage.
- J. Protect and maintain mechanical and electrical equipment in storage.
1. Provide Supplier's service instructions on the exterior of the package.
 2. Service equipment on a regular basis as recommended by the Supplier. Maintain a log of maintenance services. Submit the log as Record Data per Section 01 31 13 "Project Administration" when Owner assumes responsibility for maintenance and operation.
 3. Provide power to and energize space heaters for all equipment for which these devices are provided.
 4. Provide temporary enclosures for all electrical equipment, including electrical systems on mechanical devices. Provide and maintain heat in the enclosures until equipment is energized.
- K. Maintain storage facilities. Inspect stored products on a weekly basis and after periods of severe weather to verify that:
1. Storage facilities continue to meet specified requirements;
 2. Supplier's required environmental conditions are continually maintained; and
 3. Products that can be damaged by exposure to the elements are not adversely affected.
- L. Replace any stored item damaged by inadequate protection or environmental controls.
- M. Payment may be withheld for any products not properly stored.

1.13 CLEANING DURING CONSTRUCTION

- A. Provide positive methods to minimize raising dust from construction operations and provide positive means to prevent air-borne dust from discharging into the atmosphere. Control dust and dirt from demolition, cutting, and patching operations.

- B. Clean the Site as Work progresses and dispose of waste materials, keeping the Site free from accumulations of waste or rubbish. Provide containers at the Site for waste collection. Do not allow waste materials or debris to blow around or off of the Site. Control dust from waste materials. Transport waste materials with as few handlings as possible.
- C. Comply with Laws and Regulations. Do not burn or bury waste materials. Remove waste materials, rubbish, and debris from the Site and legally dispose of these at public or private disposal facilities.

1.14 MAINTENANCE OF ROADS, DRIVEWAYS, AND ACCESS

- A. Maintain roads and streets in a manner that is suitable for safe operations of public vehicle during all phases of construction unless the Owner approves a street closing. Do not close public roads overnight. Coordinate and arrange for emergency vehicle access when streets are to be closed.
- B. Submit a Notification by Contractor for Owner's approval of a street closing. The request must state:
 - 1. The reason for closing the street.
 - 2. How long the street will remain closed.
 - 3. Procedures to be taken to maintain the flow of traffic.
- C. Obtain permits and permissions of the entity that owns the road prior to any Work and provide a copy of the permit or permission Record Data per Section 01 31 13 "Project Administration."
- D. Construct temporary detours, including by-pass roads around construction, with adequately clear width to maintain the free flow of traffic at all times. Maintain barricades, signs, and safety features around the detour and excavations. Maintain barricades, signs, and safety features around the Work in accordance with all provisions of the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- E. Assume responsibility for any damage resulting from construction along roads or drives.

1.15 BLASTING

- A. Blasting is not allowed for any purpose.

1.16 ARCHAEOLOGICAL REQUIREMENTS

- A. Cease operations immediately and contact the Owner for instructions if historical or archaeological artifacts are found during construction.
- B. Conduct all construction activities to avoid adverse impact of the sites where significant historical or archaeological artifacts are found or identified as an area where other artifacts could be found.
 - 1. Obtain details for working in these areas from regulatory agencies.
 - 2. Maintain confidentiality regarding the site(s) of artifacts.
 - 3. Adhere to the requirements of applicable local, state, and federal Laws and Regulations.

4. Notify the Construction Manager and any local, state, or federal agency as required by applicable Laws and Regulations.
- C. Do not disturb archaeological sites.
 1. Obtain the services of a qualified archaeological specialist to instruct construction personnel on how to identify and protect archaeological finds on an emergency basis.
 2. Coordinate activities to permit archaeological work to take place within the area.
 - a. Attempt to archaeologically clear areas needed for construction as soon as possible.
 - b. Provide a determination of priority for such areas.
- D. Assume responsibility for any unauthorized destruction that might result to such sites by construction personnel, and pay all penalties assessed by state or federal agencies for non-compliance with these requirements.
- E. Contract Times will be modified to compensate for delays caused by such archaeological finds. No additional compensation will be paid for delays.

1.17 ENDANGERED SPECIES RESOURCES

- A. Do not perform any activity that is likely to destroy or adversely modify the habitat or jeopardize the continued existence of a threatened or endangered species as listed or proposed for listing under the Federal Endangered Species Act (ESA) or applicable state Laws and Regulations.
- B. Cease Work immediately in the area of the encounter and notify the Construction Manager if a threatened or endangered species is encountered during construction. Construction Manager will implement actions in accordance with the ESA and applicable state statutes. Resume construction in the area of the encounter when authorized to do so by the Construction Manager.

1.18 OCCUPANCY

- A. Owner has the right to occupy or operate any portion of the Project that is ready for use after notifying the Contractor of its intent to do so.
- B. Testing of equipment and appurtenances including specified test periods, training, and startup does not constitute acceptance for operation.
- C. Owner may accept the facility for continued use after startup and testing at the option of the Owner. If acceptance is delayed at the option of the Owner, shut down facilities per approved operation and maintenance procedures.
- D. The execution of bonds is understood to indicate the consent of the surety to these provisions for occupancy of the structures and use of equipment.
- E. Provide an endorsement from the insurance carrier permitting occupancy of the structures and use of equipment during the remaining period of construction.
- F. Conduct operations to ensure the least inconvenience to the Owner and general public.

PART 2 - PRODUCTS (NOT USED)
PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 31 13 PROJECT ADMINISTRATION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Administer contract requirements to construct the Project. Provide documentation per the requirements of this Section. Provide information as requested by the OPT.

1.02 DOCUMENTATION

- A. Provide documents in accordance with Section 01 33 00 "Document Management."

1.03 COMMUNICATION DURING THE PROJECT

- A. Construction Manager is to be the first point of contact for all parties on matters concerning this Project.
- B. Construction Manager will coordinate correspondence concerning:
 - 1. Contract administration;
 - 2. Clarification and interpretation of the Contract Documents;
 - 3. Contract modifications;
 - 4. Observation of Work and testing; and
 - 5. Claims.
- C. Construction Manager will normally communicate only with the Contractor. Any required communication with Subcontractors or Suppliers will only be with the direct involvement of the Contractor.
- D. Direct written communications to the Construction Manager at the address indicated at the pre-construction conference. Include the following with communications as a minimum:
 - 1. Name of the Owner;
 - 2. Project name;
 - 3. Contract title;
 - 4. Project number;
 - 5. Date; and
 - 6. A reference statement.
- E. Submit communications on the forms referenced in this Section or in Section 01 33 00 "Document Management."

1.04 PROJECT MEETINGS

- A. Pre-Construction Conference:
 - 1. Attend a pre-construction conference;
 - 2. The location of the conference will be determined by the Construction Manager;

3. The time of the conference will be determined by the Construction Manager, but will be after the Notice of Award is issued and not later than 15 days after the Notice to Proceed is issued;
 4. OPT, Contractor's project manager and superintendent, representatives of utility companies, and representatives from major Subcontractors and Suppliers may attend the conference; and
 5. Provide and be prepared to discuss:
 - a. Preliminary construction schedule per Section 01 33 05 "Construction Progress Schedule";
 - b. Preliminary Schedule of Documents per Section 01 33 00 "Document Management";
 - c. Schedule of Values and anticipated schedule of payments per Section 01 29 00 "Application for Payment Procedures";
 - d. List of Subcontractors and Suppliers;
 - e. Contractor's organizational chart as it relates to this Project; and
 - f. Letter indicating the agents of authority for the Contractor and the limit of that authority with respect to the execution of legal documents, contract modifications, and payment requests.
- B. Progress Meetings:
1. Attend meetings with the Construction Manager, Design Professional, and Owner.
 - a. Meet monthly or as requested by the Construction Manager to discuss the Project.
 - b. Meet at the Site or other location as designated by the Construction Manager.
 - c. Contractor's superintendent and other key personnel are to attend the meeting. Other individuals may be requested to attend to discuss specific matters.
 - d. Notify the Construction Manager of any specific items to be discussed a minimum of 1 week prior to the meeting.
 2. Provide information as requested by the Construction Manager, Design Professional or Owner concerning this Project. Prepare to discuss:
 - a. Status of overall project schedule;
 - b. Contractor's detailed schedule for the next month;
 - c. Anticipated delivery dates for equipment;
 - d. Coordination with the Owner;
 - e. Status of documents;
 - f. Information or clarification of the Contract Documents;
 - g. Claims and proposed modifications to the Contract;
 - h. Field observations, problems, or conflicts; and

- i. Maintenance of quality standards.
- 3. Construction Manager will prepare a record of meeting proceedings. Review the record of the meeting and notify the Construction Manager of any discrepancies within 10 days of the date the record of the meeting is provided. The record will not be corrected after the 10 days have expired. Corrections will be reflected in the record of the following meeting.
- C. Pre-Documentation and Pre-Installation Meetings:
 - 1. Conduct pre-documentation and pre-installation meetings as required in the individual technical Specifications or as determined necessary by the Construction Manager (for example, instrumentation, roofing, concrete mix design, etc.).
 - 2. Set the time and location of the meetings when ready to proceed with the associated Work. Submit a Notification by Contractor in accordance with Paragraph **[1.07]** for the meeting 2 weeks before the meeting. OPT must approve of the proposed time and location.
 - 3. Attend the meeting and require the participation of appropriate Subcontractors and Suppliers in the meeting.
 - 4. Construction Manager will prepare a record of meeting proceedings. Review the record of the meeting and notify the Construction Manager of any discrepancies within 10 days of the date the record of the meeting is provided. The record will not be corrected after the 10 days have expired. Corrections will be reflected in the record of the following meeting.
- D. Weekly Coordination Meetings: Meet on a weekly basis with the Construction Manager or designated on-site representative of the OPT to discuss Work planned for the following week, review coordination issues, testing required, or other issues. Records of these meetings are not required.

1.05 REQUESTS FOR INFORMATION

- A. Submit a Request for Information to the Construction Manager to obtain additional information or clarification of the Contract Documents.
 - 1. Submit a separate Request for Information for each item on the form provided by the Construction Manager.
 - 2. Attach adequate information to permit a response without further clarification. Construction Manager will return requests that do not have adequate information to the Contractor for additional information. Contractor is responsible for all delays resulting from multiple reviews due to inadequate information.
 - 3. A response will be made when adequate information is provided. The response will be made on the Request for Information form provided by the Construction Manager.
- B. Response to a Request for Information is given to provide additional information, interpretation, or clarification of the requirements of the Contract Documents, and does not modify the Contract Documents.
 - 1. Submit a Change Proposal per Section 01 26 00 "Change Management" if a contract modification is suggested or required.

- C. Use the Decision Register to document decisions made at meetings and actions to be taken in accordance with Paragraph 1.06.
- D. Use the Action Item Register to document assignments for actions to be taken in accordance with Paragraph 1.06.

1.06 DECISION AND ACTION ITEM REGISTER

- A. Construction Manager will maintain a Decision Register to document key decisions made during meetings, telephone conversations, or visits to the Site using the format provided by the Construction Manager:
 - 1. Review the Decision Register prior to each regular meeting.
 - 2. Report any discrepancies to the Construction Manager for correction or discussion at the next monthly meeting.
- B. Construction Manager will maintain an Action Item Register in conjunction with the Decision Register to track assignments made during meetings, telephone conversations or visits to the Site using the format provided by the Construction Manager:
 - 1. Review the Action Item Register prior to each regular meeting.
 - 2. Report actions taken after the previous progress meeting on items in the register assigned to the Contractor or through the Contractor to a Subcontractor or Supplier to the Construction Manager. Report on status of progress 1 week prior to each progress meeting established in Paragraph 1.04 to allow Construction Manager to update the register prior to the Progress Meetings.
 - 3. Be prepared to discuss the status at each meeting.
- C. Decisions or action items in the register that require a change in the Contract Documents will have the preparation of a Modification as an action items if appropriate. The Contract Documents can only be changed by a Modification.

1.07 NOTIFICATION BY CONTRACTOR

- A. Notify the Construction Manager of:
 - 1. Need for testing;
 - 2. Intent to work outside regular working hours;
 - 3. Request to shut down facilities or utilities;
 - 4. Proposed utility connections;
 - 5. Required observation by Construction Manager, Engineer, or inspection agencies prior to covering Work; and
 - 6. Training.
- B. Provide notification a minimum of 2 weeks in advance to allow OPT time to respond appropriately to the notification.
- C. Use the Notification by Contractor form provided by the Construction Manager.

1.08 REQUESTS FOR MODIFICATIONS

- A. Submit requests for Modifications per Section 01 26 00 "Change Management."

1.09 RECORD DATA

- A. Submit information required by the Contract Documents that is not related to a product as Record Data using the form provided by the Construction Manager.

1.10 RECORD DOCUMENTS

- A. Maintain one complete set of printed Record Documents at the Site including:
 - 1. Drawings;
 - 2. Specifications;
 - 3. Addenda;
 - 4. Modifications;
 - 5. Product Data and approved Shop Drawings;
 - 6. Construction photographs;
 - 7. Test Reports;
 - 8. Clarifications and other information provided in Request for Information responses; and
 - 9. Reference standards.
- B. Store printed Record Documents and Samples in the Contractor's field office.
 - 1. Record Documents are to remain separate from documents used for construction.
 - 2. Provide files and racks for the storage of Record Documents.
 - 3. Provide a secure storage space for the storage of Samples.
 - 4. Maintain Record Documents in clean, dry, legible conditions, and in good order.
 - 5. Make Record Documents and Samples available at all times for inspection by the OPT.
- C. Maintain an electronic record of Specifications and Addenda to identify products provided in PDF format.
 - 1. Reference the Product Data number, Shop Drawing number, and O&M manual number for each product and item of equipment furnished or installed.
 - 2. Reference Modifications by type and number for all changes.
- D. Maintain an electronic record of Drawings in PDF format.
 - 1. Reference the Product Data number, Shop Drawing number, and O&M manual number for each product and item of equipment furnished or installed.
 - 2. Reference Modifications by type and number for all changes.
 - 3. Record information as construction is being performed. Do not conceal any Work until the required information is recorded.

4. Mark drawings to record actual construction.
 - a. Depths of various elements of the foundation in relation to finished first floor datum or the top of walls.
 - b. Horizontal and vertical locations of underground utilities and appurtenances constructed, and existing utilities encountered during construction.
 - c. Location of utilities and appurtenances concealed in the Work. Refer measurements to permanent structures on the surface. Include the following equipment:
 - 1) Piping;
 - 2) Ductwork;
 - 3) Equipment and control devices requiring periodic maintenance or repair;
 - 4) Valves, unions, traps, and tanks;
 - 5) Services entrance;
 - 6) Feeders; and
 - 7) Outlets.
 - d. Changes of dimension and detail.
 - e. Changes by Modifications.
 - f. Information in Requests for Information or included in the Decision Register.
 - g. Details not on the original Drawings. Include field verified dimensions and clarifications, interpretations, and additional information issued in response to Requests for Information.
5. Mark Drawings with the following colors:
 - a. Highlight references to other documents, including Modifications in blue.
 - b. Highlight mark ups for new or revised Work (lines added) in yellow.
 - c. Highlight items deleted or not installed (lines to be removed) in red.
 - d. Highlight items constructed per the Contract Documents in green.
6. Submit Record Documents to Construction Manager for review and acceptance 30 days prior to Final Completion of the Project.
- E. Applications for Payment will not be recommended for payment if Record Documents are found to be incomplete or not in order. Final payment will not be recommended without complete Record Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 33 00 DOCUMENT MANAGEMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. Submit documentation as required by the Contract Documents and as requested by the Construction Manager.
- B. Use the Project Management Information System (PMIS) provided by the Construction Manager. Software for the PMIS is FNiManager which has the following system requirements:
 - 1. Operating Systems: Windows 7 or later and OS X v10.8 or later.
 - 2. Supported Internet Browsers: Internet Explorer 11.0 or later, Google Chrome 70.0 or later, Firefox 63.0 or later, Safari 11.0 or later, and Microsoft Edge 17.0 or later.
 - 3. Screen Resolution: The recommended screen resolution is 1280 x 1024 or higher. The minimum screen resolution required to support all features is 1024 x 768.

1.02 QUALITY ASSURANCE

- A. Submit legible, accurate, complete documents presented in a clear, easily understood manner. Documents not meeting these criteria will be returned without review as “Not Approved.”

1.03 CONTRACTOR’S RESPONSIBILITIES

- A. Review documents prior to submission. Make certifications as required by the Contract Documents and as indicated on Construction Manager provided forms.
- B. Provide a Schedule of Documents to list the documents that are to be submitted and the dates on which documents are to be sent to the Construction Manager for review. Use the form provided by the Construction Manager for this list.
- C. Incorporate the dates for processing documents into the Progress Schedule required by Section 01 33 05 “Construction Progress Schedule.”
 - 1. Provide documents in accordance with the schedule so construction of the Project is not delayed.
 - 2. Allow a reasonable time for the review of documents when preparing the Progress Schedule. Assume a 14-day review cycle for each document unless a longer period of time is indicated in the Contract Documents or agreed to by Construction Manager and Contractor.
 - 3. Schedule delivery of review documents to provide all information for interrelated Work at one time.
 - 4. Allow adequate time for processing documents so construction of the Project is not delayed.

1.04 FORMS AND WORKFLOWS

- A. Use the forms or workflow process provided by the Construction Manager for project documentation.

1.05 DOCUMENT PREPARATION AND DELIVERY PROCEDURES

- A. Deliver documents in electronic format as directed by the Construction Manager.
 - 1. Do not leave any blanks incomplete. If information is not applicable, enter NA in the space provided.
 - 2. Deliver all documents in Portable Document Format (PDF).
 - a. Create PDF document using Bluebeam Revu software.
 - b. Create PDF documents from native format files unless files are only available from scanned documents.
 - c. Rotate pages so that the top of each document appears at the top of the monitor screen when opened in PDF viewing software.
 - d. Provide PDF document with adequate resolution to allow documents to be printed in a format equivalent to the document original. Documents are to be scalable to allow printing on standard 8-1/2 x 11 or 11 x 17 paper.
 - e. Submit color PDF documents where color is required to interpret the document.
 - f. Create or convert documents to allow text to be selected for comments or searched using text search features. Run scanned documents through Optical Character Recognition (OCR) software if necessary.
 - g. Flatten markups in documents to prevent markups made by Contractor from being moved or deleted. Flatten documents to allow markup recovery.
 - h. Use Bluebeam Revu software to reduce file size using default settings except the option for "Drop Metadata". Uncheck the "Drop Metadata" box when reducing file size.
 - i. Add footers to each document with the name of the Project.

1.06 DOCUMENTATION

- A. Furnish documents as indicated in Section 01 33 01 "Document Register" or in the individual Specification Sections. Submit documents per the procedures described in the Contract Documents.
- B. Submit documents per the Specification Sections shown in the following table:

Document Type	Specification Section
Application for Payment	01 29 00
Certified Test Report	01 33 02 for approval of product 01 40 00 to demonstrate compliance
Change Management	01 26 00
Equipment Installation Report	01 75 00
Graphic Documentation	01 33 06

Document Type	Specification Section
Notification by Contractor	01 31 13
Operation & Maintenance Manuals	01 33 04
Product Data	01 33 03
Progress Schedules	01 33 05
Record Data	01 31 13
Request for Information	01 31 13
Schedule of Values	01 29 00
Shop Drawing	01 33 02
Substitutions	01 26 00
Suppliers and Subcontractors	01 31 13 01 33 03

1.07 Electronic Documents Protocol

- A. The parties shall follow the provisions in this Section, referred to as the Electronic Documents Protocol ("EDP"), for exchange of electronic transmittals.
- B. Basic Requirements:
 1. Except as otherwise stated elsewhere in the Contract Documents, the OPT and Contractor will send and accept Electronic Documents sent by Electronic Means using the protocols provided in this Section.
 2. The contents of the information in any Electronic Document will be the responsibility of the transmitting party. Electronic Documents may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, and are subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.
 3. Provisions of this Contract regarding Electronic Documents must be incorporated into other agreements or subcontracts on the Project. Nothing in this paragraph reduces or eliminates requirements:
 - a. to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations;
 - b. to comply with any applicable Law or Regulation governing the signing and sealing of design documents and related Modifications or the signing and electronic transmission of any other documents; or
 - c. to comply with the notice requirements.
 4. When sending Electronic Documents by Electronic Means the sending party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or sending Electronic Documents.

C. System Infrastructure for Electronic Document Exchange:

1. Contractor will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost. System Infrastructure must comply with these requirements.
2. The maximum size of an email attachment for exchange of Electronic Documents under this EDP is 100 MB. Attachments larger than that may be exchanged in parts or by using large file transfer functions or physical media.
3. Contractor assumes full and complete responsibility for its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software.
4. Contractor is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for maintaining operations of its System Infrastructure during the Project, including coordination with individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.
5. Contractor will operate and maintain industry-standard, industry-accepted, ISO standard, commercial-grade security software and systems that are intended to protect others from: software viruses and other malicious software like worms, trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. Contractor will not be liable to others for any breach of system security to the extent that Contractor maintains and operates required security software and systems.
6. In the case of disputes, conflicts, or modifications to the use of Electronic Documents required to address issues affecting System Infrastructure, Contractor and OPT will cooperatively resolve the issues; but, failing resolution, OPT is authorized to make and require reasonable and necessary changes meet its original intent. Contractor may submit a Change Proposal if the changes cause additional cost or time to Contractor that could not have reasonably been anticipated.
7. Contractor and OPT are both responsible for their own back-up and archive of documents sent and received during the term of the contract. Contractor and OPT remain solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract as each party deems necessary for its own purposes.
8. If a Contractor or OPT receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.
9. OPT will operate a project information management system (Project Website) for use of OPT and Contractor during the Project for exchange and storage of Project-related

communications and information. Except as otherwise provided in this Contract, use of the Project Website will be mandatory for exchange of Project documents, communications, submittals, and other Project-related information.

D. Software Requirements:

1. OPT and Contractor will each acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the following software formats:

Document	Document Format
Email	.htm, .rtf, or .txt without formatting that impair legibility of content on screen or in printed copies
Submittals	Bluebeam PDF
Applications for Payment	Bluebeam PDF and Microsoft® Excel
Progress Schedules	PDF and Schedule in Schedule in Native Format
Layouts and drawings to be submitted to Owner for future use and modification	Autodesk® AutoCAD .dwg format
Document submitted to OPT for future word processing use and modification	Microsoft® Word
Spreadsheets and data submitted to OPT for future data processing use and modification	Microsoft® Excel
Photographs	.jpg or .jpeg
Videos	.mp4, .mpeg, or .avi

2. Software will be the version currently published at the time Contract is signed, unless a specific software version is listed in the Supplementary Conditions. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or convert to comply with this Section.
3. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.

E. Requests by Contractor for Electronic Documents in Other Formats:

1. Release of any Electronic Documents developed during the design process (including Contract Documents, Technical Data, Drawings, and computer models) in formats other than those identified in this Section will be at the discretion of the OPT.
2. To the extent determined by OPT, release of Electronic Documents and other project information requested by Contractor ("Request") in formats other than those

identified in this Section will be subject to the provisions of Owner's response to the Request, and to the following conditions:

- a. The content included in the Electronic Documents covered by the Request was prepared by Design Professional as an internal working document or electronic computer model solely for Design Professional's purposes and not for any construction processes and is being provided to Contractor on an "AS IS" basis without any warranties of any kind, including, any implied warranties of fitness for any purpose. Contractor is advised and acknowledges that the content may not be suitable for Contractor's application or may require substantial modification and independent verification by Contractor. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.
 - b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Design Professional to Contractor under the Request are only for convenience of Contractor. Any conclusion or information obtained or derived from such data will be at the Contractor's sole risk and Contractor waives any claims against the Design Professional or Owner arising from use of data in Electronic Documents covered by the Request.
 - c. **CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND DESIGN PROFESSIONAL AND THEIR SUBCONSULTANTS FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEYS' FEES AND DEFENSE COSTS ARISING OUT OF OR RESULTING FROM THE CONTRACTOR'S USE, ADAPTATION, OR DISTRIBUTION OF ANY ELECTRONIC DOCUMENTS PROVIDED UNDER THE REQUEST.**
 - d. Contractor agrees not to sell, copy, transfer, forward, give away or otherwise distribute this information (in source or modified file format) to any third party without the direct written authorization of Design Professional, unless such distribution is specifically identified in the Request and is limited to the Contractor's subcontractors. Contractor warrants that subsequent use by the Contractor's subcontractors complies with all terms of the Contract Documents and the Owner's response to Request.
3. In the event that Owner elects to provide or directs Design Professional to provide to Contractor any Contractor-requested Electronic Document versions of project information that is not explicitly identified in the Contract Documents as being available to Contractor, Owner shall be reimbursed by Contractor on an hourly basis for any costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Design Professional in accordance with the General Conditions.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 33 02 SHOP DRAWINGS

PART 1 - GENERAL

1.01 SUMMARY

- A. Shop Drawings are required for those products that cannot adequately be described in the Contract Documents to allow fabrication, erection, or installation of the product without additional detailed information from the Supplier.
- B. Submit Shop Drawings as required by the Contract Documents and as reasonably requested by the Construction Manager to:
 - 1. Record the products incorporated into the Project;
 - 2. Provide detailed information for the products proposed for the Project regarding their fabrication, installation, commissioning, and testing; and
 - 3. Allow the Design Professional to advise the Owner if products proposed for the Project by the Contractor conform, in general, to the design concepts of the Contract Documents.
- C. Contractor's responsibility for full compliance with the Contract Documents is not relieved by the review of Shop Drawings, Samples, or mockups.
- D. Submit a Change Proposal per Section 01 26 00 "Change Management" to request modifications to the Contract Documents, including those for approval of "or equal" products when specifically allowed by the Contract Documents or as a substitution for specified products or procedures. Deviations from the Contract Documents can only be approved by Change Order or Field Order.

1.02 QUALITY ASSURANCE

- A. Submit legible, accurate, and complete documents presented in a clear, easily understood manner. Shop Drawings not meeting these criteria will not be approved.
- B. Demonstrate that the proposed products are in full compliance with the design criteria and requirements of the Contract Documents, or will be if deviations requested per Paragraph 1.10 are approved.
- C. Furnish and install products that fully comply with the information included in the Shop Drawings.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Include Shop Drawings in the Document Register required by Section 01 33 00 "Document Management" to indicate the Shop Drawings to be submitted, the dates on which Shop Drawings are to be sent to the Construction Manager for review, and proposed dates that the product will be incorporated into the Project.
- B. Incorporate the dates for processing Shop Drawings into the Progress Schedule required by Section 01 33 05 "Construction Progress Schedule."
 - 1. Submit Shop Drawings in accordance with the schedule so construction of the Project is not delayed.

2. Submit Shop Drawings for interrelated Work at one time.
 3. Allow adequate time for ordering, fabricating, delivering, and installing products so construction of the Project is not delayed.
- C. Complete the following before submitting a Shop Drawing or Sample:
1. Prepare and review the Shop Drawing or Sample. Coordinate the Shop Drawing or Sample with other Shop Drawings and Samples, with the requirements of the Work, and the Contract Documents;
 2. Determine and verify specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to Shop Drawings and Samples;
 3. Determine and verify the suitability of materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 4. Determine and verify information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- D. Determine and verify:
1. Field measurements, quantities, and dimensions are shown on the Shop Drawing and are accurate;
 2. Location of existing structures, utilities, and equipment related to the Shop Drawing have been shown and conflicts between the products, existing structures, utilities, and equipment have been identified;
 3. Conflicts that impact the installation of the products have been brought to the attention of the Construction Manager;
 4. Shop Drawing is complete for its intended purpose; and
 5. Conflicts between the Shop Drawing related to the various Subcontractors and Suppliers have been resolved.
- E. Review Shop Drawings prior to submitting to the Construction Manager. Certify that all Shop Drawings have been reviewed by the Contractor and are in strict conformance with the Contract Documents as modified by Addenda, Change Order, Field Order, or Contract Amendment when submitting Shop Drawings except for deviations specifically brought to the Construction Manager's attention on an attached Shop Drawing Deviation Request form in accordance with Paragraph 1.11.
- F. Fabrication or installation of any products prior to the approval of Shop Drawings is done at the Contractor's risk. Defective products may be rejected at the Owner's option.
- G. Payment will not be made for products for which Shop Drawings or Samples are required until these are approved by the Construction Manager and Design Professional.

1.04 DOCUMENTATION

- A. Provide adequate information in Shop Drawings and with Samples so the Design Professional can:
 - 1. Assist the Owner in selecting colors, textures, or other aesthetic features.
 - 2. Compare the proposed features of the product with the specified features and advise Owner that the product does, in general, conform to the Contract Documents.
 - 3. Compare the performance features of the proposed product with those specified and advise the Owner that the product does, in general, conform to the performance criteria specified in the Contract Documents.
 - 4. Review required certifications, guarantees, warranties, and service agreements for compliance with the Contract Documents.
- B. Include a complete description of the material or equipment to be furnished, including:
 - 1. Type, dimensions, size, arrangement, model number, and operational parameters of the components;
 - 2. Weights, gauges, materials of construction, external connections, anchors, and supports required;
 - 3. Performance characteristics, capacities, engineering data, motor curves, and other information necessary to allow a complete evaluation of mechanical components;
 - 4. All applicable standards;
 - 5. Fabrication and installation drawings, setting diagrams, manufacturing instructions, templates, patterns, and coordination drawings;
 - 6. Wiring and piping diagrams and related controls;
 - 7. Mix designs for concrete, asphalt, or other materials proportioned for the Project; and
 - 8. Complete and accurate field measurements for products which must fit existing conditions. Indicate on the document that the measurements represent actual dimensions obtained at the Site.
- C. Submit Shop Drawings that require coordination with other Shop Drawings for fabrication at the same time. Shop Drawings requiring coordination with other Shop Drawings will not be approved until a complete package is submitted, unless approved by the Construction Manager.
- D. Submit information for all of the components and related equipment required for a complete and operational system in one Submittal.
 - 1. Include electrical, mechanical, and other information required to indicate how the various components of the system function together as a system.
 - 2. Provide certifications, warranties, and written guarantees and service contracts with the document package for review when these are required.

1.05 SPECIAL CERTIFICATIONS AND REPORTS

- A. Provide all required special certifications, reports, and other documentation with the Shop Drawings as specified in the individual Specification Sections which may include:
 - 1. Certified Test Reports (CTR): A report prepared by an approved testing agency giving results of tests performed on products to indicate their compliance with the Specifications. This report is to demonstrate that the product, when installed, will meet the requirements of the Contract Documents and is part of the Shop Drawing. Field tests may be performed by the Owner to determine that in place materials or products meet the same quality as indicated in the CTR submitted as part of the Shop Drawing.
 - 2. Certification of Local Field Service (CLS): A certified letter stating that field service is available from a factory or supplier approved service organization located within a 300-mile radius of the Site. Include the names, addresses, and telephone numbers of approved service organizations with the certificate.
 - 3. Certification of Adequacy of Design (CAD): A certified letter from the manufacturer of the equipment stating that the equipment has been designed to be structurally stable and to withstand all imposed loads without deformation, failure, or adverse effects to the performance and operational requirements of the unit. The letter must state that mechanical and electrical components have been adequately sized to be fully operational for the conditions specified or normally encountered by the product's intended use.
 - 4. Certification of Applicator/Subcontractor (CSQ): A certified letter stating that the applicator or subcontractor proposed to perform a specified function is duly designated as factory authorized and trained for the application of the specified product.

1.06 WARRANTIES AND GUARANTEES

- A. Provide all required warranties, guarantees, and related documents with the Shop Drawing. The effective date of warranties and guarantees will be the date of Substantial Completion.
- B. Identify all extended warranties which are defined as any guarantee of performance for the product or system beyond the one-year correction period described in the General Conditions. Issue the warranty certificate in the name of the Owner. Provide a warranty bond for extended warranties if required by the individual Specification Sections.
- C. Include an additional copy of equipment warranties in operation and maintenance manuals.
- D. Provide a copy of all warranties in a separate document in accordance with Section 01 70 00 "Execution and Closeout Requirements."

1.07 EXTENDED SERVICE AGREEMENTS

- A. Provide Extended Service Agreements and related documents with the Product Data. An Extended Service Agreement is a contract between the Owner and an approved Subcontractor or Supplier to provide service and or maintenance beyond that required to

fulfill requirements for warranty repairs, or to perform routine maintenance for a definite period beyond the one-year correction period specified in the General Conditions.

- B. An Extended Service Agreement does not relieve the Contractor from obligations under the one-year correction period or warranty provisions specified in the General Conditions.
- C. An Extended Service Agreement does not relieve the Contractor from obligations under the maintenance bond, if a maintenance bond is required by the Contract.
- D. Requirements for the Extended Service Agreement are described in the Specification Sections for each piece of equipment or system requiring an Extended Service Agreement.
- E. Enter into a contract with the service provider and assign the service contract to the Owner on the date Substantial Completion. Once assigned to the Owner, Contract requirements for the Extended Service Agreement will be complete and will not extend the Contract between the Owner and Contractor.
- F. Owner may require that a performance bond be provided for the Extended Service Agreement. Provide a separate bond meeting the same requirements as those for the Contractor's performance bond if required. The bond will be in the amount of the Extended Service Agreement.
- G. Include an additional copy of Extended Service Agreements in operation and maintenance manuals.
- H. Provide a copy of Extended Service Agreements in a separate document in accordance with Section 01 70 00 "Execution and Closeout Requirements."

1.08 SHOP DRAWING SUBMITTAL PROCEDURES

- A. Submit Shop Drawings to the Construction Manager. Send all documents in digital format for processing.
 - 1. Provide all information requested. Do not leave any blanks incomplete. If information is not applicable, enter NA in the space provided.
 - 2. Submit all documents in Portable Document Format (PDF) as required by Section 01 33 00 "Document Management." Provide color PDF documents where color is required to interpret the Shop Drawing. Provide Samples and color charts per Paragraph 1.09.
 - 3. Submit each specific product, class of material, or equipment system separately so these can be tracked and processed independently. Do not submit Shop Drawings for more than one independent system in the same Submittal.
 - 4. Submit items specified in different Specification Sections separately unless they are part of an integrated system.
 - 5. Define abbreviations and symbols used in Shop Drawings.
 - a. Use terms and symbols in Shop Drawings consistent with the Contract Drawings.
 - b. Provide a list of abbreviations and their meaning as used in the Shop Drawings.
 - c. Provide a legend for symbols used on Shop Drawings.

6. Mark Shop Drawings to reference:
 - a. Related Specification Sections;
 - b. Drawing number and detail designation;
 - c. Equipment designation or name;
 - d. Schedule references;
 - e. System into which the product is incorporated; and
 - f. Location where the product is incorporated into the Project.
- B. Use the following conventions to markup Shop Drawings for review:
 1. Make comments and corrections in the color blue. Add explanatory comments to the markup.
 2. Highlight items in black (redact) that are not being furnished when the Supplier's standard drawings or information sheets are provided so that only the products to be provided are in their original color.
 3. Make comments in yellow where selections or decisions by the Design Professional are required, but such selections do not constitute a deviation from the Contract Documents. Add explanatory comments to the markup to indicate the action requested of the Design Professional.
 4. Make comments in orange that are deviation requests. Include the deviation request number on the Shop Drawing that corresponds to the deviation request on the Shop Drawing Deviation Request form. Include explanatory comments in the Shop Drawing Deviation Request form.
 5. Mark dimensions with the prefix "FD" to indicate field verified dimensions on the Shop Drawings.
- C. Designate a document as requiring priority treatment to place the review of the Shop Drawing ahead of other Shop Drawings previously delivered. Shop Drawings are typically reviewed in the order received, unless Contractor requests that a different priority be assigned. Priority Shop Drawings will be reviewed before other Shop Drawings already received but not yet reviewed. Use of this priority designation for Shop Drawings may delay the review of Shop Drawings previously submitted. Contractor is responsible for delays resulting from the use of the priority designation status on Shop Drawings.
- D. Complete the certification required by Paragraph 1.03.G.

1.09 SAMPLE AND MOCKUP SUBMITTAL PROCEDURES

- A. Submit color charts and Samples for every product requiring color, texture, or finish selection.
 1. Submit color charts and Samples only after Shop Drawings for the products have been approved.
 2. Deliver all color charts and Samples at one time.
 3. Provide Samples of adequate size to clearly illustrate the functional characteristics of the product, with integrally related parts and attachment devices.

4. Indicate the full range of color, texture, and patterns.
 5. Deliver color charts and Samples to the field office and store for the duration of the Project.
 6. Notify the Construction Manager that color charts and Samples have been delivered for approval using the Notification by Contractor form.
 7. Submit color charts and Samples not less than 30 days prior to when these products are to be ordered or released for fabrication to comply with the Project schedule.
 8. Remove Samples that have not been approved. Submit new Samples following the same process as for the initial Sample until Samples are approved.
 9. Dispose of Samples when related Work has been completed and approved and disposal is approved by the Construction Manager. At Owner's option, Samples will become the property of the Owner.
- B. Construct mockups for comparison with the Work being performed.
1. Construct mockups from the actual products to be used in construction per the detailed specifications.
 2. Construct mockups of the size and in the area indicated in the Contract Documents.
 3. Construct mockups complete with texture and finish to represent the finished product.
 4. Notify the Construction Manager that mockups have been constructed and are ready for approval using the Notification by Contractor form. Allow 2 weeks for Construction Manager to approve of the mockup before beginning the Work represented by the mockup.
 5. Remove mockups that have not been approved. Construct new mockups following the same process as for the initial mockup until mockup is approved.
 6. Protect mockups until Work has been completed and accepted by the Construction Manager.
 7. Dispose of mockups when related Work has been completed and disposal is approved by the Construction Manager.

1.10 REQUESTS FOR DEVIATION

- A. Submit a Change Proposal per Section 01 26 00 "Change Management" to request modifications to the Contract Documents, including those for approval of "or equal" products when specifically allowed by the Contract Documents or as a substitution for specified products or procedures.
- B. Provide a Shop Drawing with the Change Proposal that clearly identifies deviations for any product or component of the product that does not fully comply with the Contract Documents using the Shop Drawing Deviation Request form provided by the Construction Manager. Mark deviations on the Shop Drawing per Paragraph 1.08.B.
- C. Include a description of why the deviation is required and the impact on Contract Price or Contract Times. Include the amount of any cost savings to the Owner for deviations that result in a reduction in cost.

- D. Identify each deviation request as a separate item. Include all requested deviations that must be approved as a group together and identify them as a single item.
- E. Construction Manager will issue a Field Order or Change Order to approve acceptable deviations. Approval of a requested Shop Drawing deviation by the Design Professional on the Shop Drawings Deviation Request form indicates approval of the requested deviation only on its technical merits as generally conforming to the Contract Documents. Deviations from the Contract Documents can only be approved by a Modification issued by the Construction Manager.

1.11 CONSTRUCTION MANAGER AND DESIGN PROFESSIONAL RESPONSIBILITIES

- A. Shop Drawings will be received by the Construction Manager. Construction Manager will log the documents and forward to the Design Professional for review per this Section for general conformance with the Contract Documents.
 - 1. Design Professional's review and approval will be only to determine if the products described in the Shop Drawing or Sample will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 - 2. Design Professional's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 - 3. Design Professional's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- B. Comments will be made on items called to the attention of the Design Professional for review and comment. Any marks made by the Design Professional do not constitute a blanket review of the document or relieve the Contractor from responsibility for errors or deviations from the Contract requirements.
 - 1. Design Professional will respond to Contractor's markups by either making markups directly in the Shop Drawing file using the color red or by attaching a Document Review Comments form with review comments keyed to the Drawings or Shop Drawing Deviation Request.
 - 2. Shop Drawings that are reviewed will be returned with one or more of the following status designations:
 - a. Approved: Shop Drawing is found to be acceptable as submitted.
 - b. Approved as Noted: Shop Drawing is approved so long as corrections or notations made by Design Professional are incorporated into the Shop Drawing.
 - c. Not Approved: Shop Drawing or products described are not acceptable.
 - d. Cancelled: This action indicates that for some reason, the Shop Drawing is to be removed from consideration and all efforts regarding the processing of that document are to cease.

3. Shop Drawings will also be designated for one of the following actions:
 - a. Documents Filed: Shop Drawing is acceptable without further action and has been filed as a record document.
 - b. Shop Drawing Not Required: A Shop Drawing was not required by the Contract Documents. Resubmit the document per Section 01 33 03 "Product Data."
 - c. Cancelled: This action indicates that for some reason, the Shop Drawing is to be removed from consideration and all efforts regarding the processing of that document are to cease.
 - d. Revise and Resubmit: Shop Drawing has deviations from the Contract Documents, significant errors, or is inadequate and must be revised and resubmitted for subsequent review.

Actions "a" through "c" will close out the Shop Drawing review process and no further action is required as a Shop Drawing. Action "d" requires follow up action to close out the review process.

4. Drawings with a significant or substantial number of markings by the Contractor may be marked "Approved as Noted." These drawings are to be revised to provide a clean record of the document. Proceed with ordering products as the documents are revised.
 5. Dimensions or other data that do not appear to conform to the Contract Documents will be marked as "At Variance With" (AVW) the Contract Documents or other information provided. The Contractor is to make revisions as appropriate to comply with the Contract Documents.
- C. Bring deviations to the Shop Drawings to the attention of the Design Professional for approval by using the Shop Drawing Deviation Request form. Use a single line for each requested deviation so the Status and Action for each deviation can be determined for that requested deviation. If approval or rejection of a requested deviation will impact other requested deviation, then all related deviations should be included in that requested deviation line so the status and action can be determined on the requested deviation as a whole.
- D. Requested deviations will be reviewed as a possible Modification to the Contract Documents.
1. A requested deviation will be marked as "Not Approved" if the requested deviation is unacceptable. Contractor is to revise and resubmit the Shop Drawing with corrections for approval.
 2. A Field Order will be issued by the Construction Manager for deviations approved by the Design Professional if the requested deviation is acceptable and if the requested deviation will not result in a change in Contract Price or Contract Times. Requested deviations from the Contract Documents may only be approved by Field Order.
 3. A requested deviation will not be approved if the requested deviation is acceptable but the requested deviation will or should result in a change in Contract Price or Contract Times. Submit any requested deviation that requires a change in Contract

Price or Contract Times as a Change Proposal for approval prior to resubmitting the Shop Drawing.

- E. Contractor is to resubmit a complete Shop Drawing incorporating revisions until it is acceptable and marked "Approved" or "Approved as Noted" and is assigned an action per Paragraph 1.11.B.3 that indicates that the Shop Drawing process is closed.
- F. Information that is submitted as a Shop Drawing that should be submitted as Product Data or other type of document, or is not required may be returned without review, or may be deleted. No further action is required and the Shop Drawing process for this document will be closed.

1.12 RESUBMISSION REQUIREMENTS

- A. Make all corrections or changes required by the Design Professional in the document and resubmit to the Construction Manager until approved.
- B. Resubmit a complete Shop Drawing for each resubmittal. The last approved Shop Drawing must not rely on previous submissions. The final Shop Drawing is to provide a complete record for the Owner's records.
- C. Revise initial drawings or data and resubmit as specified for the reviewed document.
 - 1. Highlight or cloud in green those revisions which have been made in response to the previous reviews by the Design Professional. This will include changes previously highlighted or clouded in yellow to direct attention to Design Professional to items requiring selections, decisions by the Design Professional or highlighted or clouded in orange for a requested deviation from the Contract Documents, or comments in red made by the Construction Manager.
 - 2. Highlight and cloud new items in yellow where selections or decisions by the Design Professional are required, but such selections do not constitute a deviation from the Contract Documents. Add explanatory comments to the markup to indicate the action to be taken by the Design Professional.
 - 3. Highlight and cloud new items in orange that are deviation requests. Include the deviation request number on the Shop Drawing that corresponds to the deviation request on the Shop Drawing Deviation Request form. Numbering for these new items is to start with the next number following the last Shop Drawing deviation requested. Include explanatory comments in the Shop Drawing Deviation Request form.
- D. Pay for excessive review of Shop Drawings.
 - 1. Excessive review of Shop Drawings is defined as any review required after the original review has been made and the first resubmittal has been checked to see that corrections have been made.
 - 2. Review of Shop Drawings or Samples will be an additional service requiring payment by the Contractor if the Contractor submits a substitution for a product for which a Shop Drawing or Sample has previously been approved, unless the need for such change is beyond the control of Contractor.
 - 3. Cost for additional review time will be billed to the Owner by the Design Professional for the actual hours required for the review of Shop Drawings by Design Professional

and in accordance with the rates listed in Section 00 73 00 "Supplementary Conditions."

4. A set-off will be included in each Application for Payment to pay the cost for the additional review. The set-off will be based on invoices submitted to the Owner for these services.
5. Need for more than one resubmission or any other delay in obtaining Design Professional's approval of Shop Drawings will not entitle the Contractor to an adjustment in Contract Price or an extension of Contract Times.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 33 03 **PRODUCT DATA**

PART 1 - GENERAL

1.01 SUMMARY

- A. Submit Product Data as required by the Contract Documents and as reasonably requested by the Construction Manager. Provide Product Data for all products unless a Shop Drawing is required for the same item.
- B. Submit Product Data to provide documents that allow the Owner to:
 - 1. Record the products incorporated into the Project;
 - 2. Record detailed information about products regarding their fabrication, installation, commissioning, and testing; and
 - 3. Provide replacement or repair of products at some future date.
- C. Contractor's responsibility for full compliance with the Contract Documents is not relieved by the receipt or cursory review of Product Data.
- D. Submit a Change Proposal per Section 01 26 00 "Change Management" to request modifications to the Contract Documents, including those for approval of "or equal" products when specifically allowed by the Contract Documents or as a substitution for specified products or procedures. Deviations from the Contract Documents can only be made by an approved Change Order or Field Order.

1.02 QUALITY ASSURANCE

- A. Submit legible, accurate, and complete documents presented in a clear, easily understood manner. Product Data not meeting these criteria will not be accepted and must be resubmitted.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Product Data is required for the following items:

Specification Section	Product Data Description
31 23 33	Trenching and Backfilling
33 23 23.4	Flowable Fill
33 05 05.31	Hydrostatic Testing
33 12 19	Water Utility Distribution Fire Hydrants
33 31 13.16	HDPE Piping
40 05 61	Gate Valves

- B. Include Product Data in the Document Register required by Section 01 33 00 "Document Management" to indicate the Product Data to be submitted, the dates on which documents are to be sent to the Construction Manager for review, and proposed dates that the product will be incorporated into the Project.

- C. Complete the following before submitting Product Data:
 - 1. Prepare Product Data and coordinate with Shop Drawings, Samples, Product Data for related products, and with the requirements of the Contract Documents;
 - 2. Determine and verify specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information;
 - 3. Determine and verify the suitability of materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 4. Determine and verify information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- D. Determine and verify:
 - 1. Field measurements, quantities, and dimensions are shown on the Product Data and are accurate;
 - 2. Location of existing structures, utilities, and equipment related to the Product Data have been shown and conflicts between the products, existing structures, utilities, and equipment have been brought to the attention of the Construction Manager;
 - 3. Conflicts that impact the installation of the products have been brought to the attention of the Construction Manager;
 - 4. Product Data is complete for its intended purpose; and
 - 5. Conflicts between the Product Data related to the various Subcontractors and Suppliers have been resolved.
- E. Review Product Data prior to submitting to the Construction Manager. Certify that all Product Data has been reviewed by the Contractor and is in strict conformance with the Contract Documents as modified by Addenda, Change Order, Field Order, or Contract Amendment when submitting Product Data.

1.04 DOCUMENTATION

- A. Include a complete description of the material or equipment to be furnished, including:
 - 1. Type, dimensions, size, arrangement, model number, and operational parameters of the components;
 - 2. Weights, gauges, materials of construction, external connections, anchors, and supports required;
 - 3. Performance characteristics, capacities, engineering data, motor curves, and other information necessary to allow a complete evaluation of mechanical components;
 - 4. All applicable standards;
 - 5. Fabrication and installation drawings, setting diagrams, manufacturing instructions, templates, patterns, and coordination drawings;
 - 6. Wiring and piping diagrams and related controls;

7. Mix designs for concrete, asphalt, or other materials proportioned for the Project; and
 8. Complete and accurate field measurements for products which must fit existing conditions. Indicate on the document that the measurements represent actual dimensions obtained at the Site.
- B. Submit information for all components and related equipment required for a complete and operational system in one submittal.
1. Include electrical, mechanical, and other information required to indicate how the various components of the system function together as a system.
 2. Provide certifications, warranties, and written guarantees and service contracts with the document package for review when these are required.

1.05 SPECIAL CERTIFICATIONS AND REPORTS

- A. Provide all required certifications with the Product Data as specified in the individual Specification Sections:
1. Certified Test Reports (CTR): A report prepared by an approved testing agency giving results of tests performed on products to indicate their compliance with the Specifications. This report is to demonstrate that the product when installed will meet the requirements of the Contract Documents and is part of the Product Data. Field tests may be performed by the Owner to determine that in place materials or products meet the same quality as indicated in the CTR submitted as part of the Product Data.
 2. Certification of Local Field Service (CLS): A certified letter stating that field service is available from a factory or supplier approved service organization located within a 300-mile radius of the Site. Include the names, addresses, and telephone numbers of approved service organizations with the certificate.
 3. Certification of Adequacy of Design (CAD): A certified letter from the manufacturer of the equipment stating that the equipment has been designed to be structurally stable and to withstand all imposed loads without deformation, failure, or adverse effects to the performance and operational requirements of the unit. The letter must state that mechanical and electrical components have been adequately sized to be fully operational for the conditions specified or normally encountered by the product's intended use.
 4. Certification of Applicator/Subcontractor (CSQ): A certified letter stating that the applicator or subcontractor proposed to perform a specified function is duly designated as factory authorized and trained for the application of the specified product.

1.06 WARRANTIES AND GUARANTEES

- A. Provide all required warranties, guarantees, and related documents with the Product Data. The effective date of warranties and guarantees will be the date of Substantial Completion.
- B. Identify all Extended Warranties which are defined as any guarantee of performance for the product or system beyond the one-year correction period described in the General Conditions. Issue the warranty certificate in the name of the Owner. Provide a warranty bond for extended warranties if required by Specification Sections.

- C. Include an additional copy of equipment warranties in operation and maintenance manuals.
- D. Provide a copy of all warranties in a separate document in accordance with Section 01 70 00 "Execution and Closeout Requirements."

1.07 EXTENDED SERVICE AGREEMENTS

- A. Provide Extended Service Agreements and related documents with the Product Data. An Extended Service Agreement is a contract between the Owner and an approved Subcontractor or Supplier to provide service and or maintenance beyond that required to fulfill requirements for warranty repairs, or to perform routine maintenance for a definite period beyond the one-year correction period specified in the General Conditions.
- B. An Extended Service Agreement does not relieve the Contractor from obligations under the one-year correction period or Warranty provisions specified in the General Conditions.
- C. An Extended Service Agreement does not relieve the Contractor from obligations under the maintenance bond, if a maintenance bond is required by the Contract.
- D. Requirements for the Extended Service Agreement are described in the Specification Sections for each piece of equipment or system requiring an Extended Service Agreement.
- E. Enter into a contract with the service provider and assign the service contract to the Owner on the date of Substantial Completion. Once assigned to the Owner, Contract requirements for the Extended Service Agreement will be complete and will not extend the Contract between the Owner and Contractor.
- F. Owner may require that a performance bond be provided for the Extended Service Agreement. Provide a separate bond meeting the same requirements as those for the Contractor's performance bond if required. The bond will be in the amount of the Extended Service Agreement.
- G. Include an additional copy of Extended Service Agreements in operation and maintenance manuals.
- H. Provide a copy of Extended Service Agreements in a separate document in accordance with Section 01 70 00 "Execution and Closeout Requirements."

1.08 PRODUCT DATA SUBMITTAL PROCEDURES

- A. Submit Product Data to the Construction Manager. Send all documents in digital format for processing.
 - 1. Provide all information requested. Do not leave any blanks incomplete. If information is not applicable, enter NA in the space provided.
 - 2. Submit all documents in Portable Document Format (PDF) as required by Section 01 33 00 "Document Management." Provide color PDF documents where color is required to interpret the Product Data.
 - 3. Submit each specific product, class of material, or equipment system separately so these can be tracked and processed independently. Do not submit Product Data for more than one system in the same Submittal.

4. Submit items specified in different Specification Sections separately unless they are part of an integrated system.
 5. Define abbreviations and symbols used in Product Data.
 - a. Use terms and symbols in Product Data consistent with the Contract Drawings.
 - b. Provide a list of abbreviations and their meaning as used in the Product Data.
 - c. Provide a legend for symbols used on Product Data.
 6. Mark Product Data to reference:
 - a. Related Specification Sections;
 - b. Drawing number and detail designation;
 - c. Equipment designation or name;
 - d. Schedule references;
 - e. System into which the product is incorporated; and
 - f. Location where the product is incorporated into the Project.
- B. Complete the certification required by Paragraph 1.03.E.

1.09 CONSTRUCTION MANAGER AND DESIGN PROFESSIONAL RESPONSIBILITIES

- A. Product Data will be received by the Construction Manager, logged, and provided to Owner as the Project record.
1. Product Data may be reviewed to see that the information provided is adequate for the purpose intended. Product Data not meeting the requirements of Paragraph 1.02 may not be approved.
 2. Product Data is not reviewed for compliance with the Contract Documents. Comments may be returned if deviations from the Contract Documents are noted during the cursory review performed to see that the information is adequate.
 3. Contractor's responsibility for full compliance with the Contract Documents is not relieved by the review of Product Data. Contract modifications can only be approved by a Change Order or Field Order.
- B. Construction Manager may take the following action in processing Product Data:
1. File Product Data as received if the cursory review indicates that the document meets the requirements of Paragraph 1.02. Document will be marked "Filed as Received" and "Documents Filed." No further action is required on that Product Data.
 2. Not approve the Product Data for one of the following reasons:
 - a. The documentation requirements of the Contract Documents indicate that the document submitted as Product Data should have been submitted as a Shop Drawing. The Product Data will be marked "Not Approved" and "Submit as Shop Drawing." No further action is required on this document as Product Data and the Product Data process will be closed. Resubmit the document as a Shop Drawing per Section 01 33 02 "Shop Drawings."

- b. The cursory review indicates that the document does not meet the requirements of Paragraph 1.02. The Product Data will be marked “Not Approved” and “Revise and Resubmit.” Contractor is to resubmit the Product Data until it is acceptable and marked “Filed as Received.” When Product Data is filed, no further action is required and the Product Data process will be closed.
 - c. The Product Data is not required by the Contract Documents nor is applicable to the Project. The Product Data will be marked “Not Approved” and “Cancelled.” No further action is required and the Product Data process will be closed.
- C. Contractor is to resubmit the Product Data until it is acceptable and marked “Filed as Received.”

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 33 04 OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 SUMMARY

- A. Prepare a complete and detailed operation and maintenance manual (manual) for each type and model of equipment or product furnished and installed under this Contract.
- B. Prepare manuals in the form of an instruction manual for the Owner. The manuals are to be suitable for use in providing the operation and maintenance instructions required by Section 01 79 00 "Training of Operation and Maintenance Personnel."
- C. Provide complete and detailed information specifically for the products or systems provided for this Project. Include the information required to operate and maintain the product or system.
- D. Manuals are to be provided in addition to any information packed with or attached to the product when delivered. Remove information packed with or attached to the product and include this information as an attachment to the manual.
- E. Include cost for manuals provided by Suppliers and Subcontractors as described in this Section in the Cost of Work for that equipment item.

1.02 DOCUMENTATION

- A. Submit manuals in accordance with Section 01 33 00 "Document Management." Attach a copy of the Operation and Maintenance Manual Review Report form provided by the Construction Manager to each manual with pertinent information completed.
- B. Provide one preliminary electronic copy of the manual to the Construction Manager for review within 15 days after review of any equipment submittal by the OPT.
- C. Provide one electronic copy and three printed copies of the final manual after:
 - 1. Preliminary manuals have been approved;
 - 2. Field test records have been incorporated into the manual; and
 - 3. Record Documents per Section 01 31 13 "Project Administration" have been approved and have been incorporated in the final manual.
- D. Provide copies of the manufacturer's warranties, guarantees, or service agreements in accordance with Section 01 70 00 "Execution and Closeout Requirements."

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide digital files for each manual as specified in Paragraph 2.02.
 - 1. Use filenames that correspond to the equipment designation shown in the Contract Documents or other equipment designations provided by the OPT.
 - 2. Submit a preliminary version of the electronic manual for review. Provide a final version of the manual incorporating OPT's comments.

- B. Provide printed copies of each manual as specified in Paragraph 2.03.

2.02 ELECTRONIC MANUAL FORMAT

- A. Manual contents are to be submitted in electronic format to the Construction Manager.
- B. Provide individual electronic files for each manual.
 - 1. Maximum file size is 75 MB. If manual is greater than maximum allowable file size, provide individual files for each major section of manual.
 - 2. Acceptable file types for written documents are Portable Document File (PDF) or provide manual text in Microsoft Word. Provide drawings in native format and PDF format. All files must be compatible with the latest software version available.
 - 3. Filename must identify the equipment location, equipment manufacturer, and date equipment placed in service, e.g. JCC1-Pump Room-Manufacturer-200503.pdf.
 - 4. Each electronic file must contain a table of contents at the beginning of the file which includes hypertext links or bookmarks to navigate the file contents per section/chapter.
 - 5. Scanned images of written documents are not acceptable. Document must allow character selection. Text within a file must be transferable to other documents.
 - 6. Drawing files must have the ability to turn on/off drawing layers within the file.

2.03 PRINTED MANUAL FORMAT

- A. Printed copies of each manual are to be submitted as follows:
 - 1. Print manuals on heavy, first quality 8-1/2 x 11 paper.
 - a. Reduce drawings and diagrams to 8-1/2 x 11 paper size.
 - b. When reduction is not practical, fold drawings and place each separately in a clear, super heavy weight, top loading polypropylene sheet protector designed for three-ring binder use. Provide a typed identification label on each sheet protector.
 - c. Punch paper for standard three-ring binders.
 - 2. Place manuals in heavy duty presentation, d-ring binders with clear front, back, and spine covers.
 - 3. Identify each manual by placing a printed cover sheet in the front cover of the binder and as the first page in the manual. The first page is to be placed in a clear polypropylene sheet protector. The information on first page and the cover page are to include:
 - a. Name of Owner;
 - b. Project name;
 - c. Volume number; and
 - d. Table of contents.
 - 4. Insert the name of the Project and volume number into the spine covers.

5. Sheet lifters are to be provided.
6. Minimum size is 2-inch capacity. Maximum size is 3-inch capacity. Fill binders to only three-fourths of its indicated capacity to allow for addition of materials to each binder by the Owner.
7. Provide index tabs for each section of the manual. Indexes are to be constructed of heavy-duty paper with a reinforced binding edge. The designation on each index tab is to correspond to the number and letter assigned in the Table of Contents.
8. Manuals for several products or systems may be provided in the same binder. Correlate the data into related groups when multiple products or systems are included in the same binder.
 - a. Sections for each product or system must be included in the same binder.
 - b. Sections must be in numerical order from volume to volume.

PART 3 - EXECUTION

3.01 MANUAL ORGANIZATION AND CONTENTS

- A. Provide a table of contents listing each section of the manual for each product or system.
 1. Assign a number and letter to each section in the manual.
 - a. The number is to correspond to the Owner's equipment numbering system or other system designated in the Contract Documents.
 - b. The letter assigned will represent the part of the manual, consistent with the manual contents as required by this Section.
 2. Identify each product or system using the nomenclature shown in the Contract Documents. Provide a cross reference to the Owner's numbering system and designations for equipment indicated in the Contract Documents if these are different.
- B. Include only the information that pertains to the product described. Annotate each sheet to:
 1. Clearly identify the specific product or component installed;
 2. Clearly identify the data applicable to the installation; and
 3. Delete or strike through references to inapplicable information.
- C. Supplement manual information with drawings as necessary to clearly illustrate relations of component parts of equipment and systems, and control and flow diagrams.
- D. Manuals for several products or systems may be provided in the same binder.
- E. Fill binders to only three-fourths of its indicated capacity to allow for addition of information by the Owner.

3.02 EQUIPMENT AND SYSTEMS MANUAL CONTENT

- A. Provide the following information in the first tabbed section of each manual:
 1. A description of the unit and component parts and how it functions.

2. Operating instructions for pre-startup, startup, normal operations, regulation, control, shutdown, emergency conditions, and limiting operating conditions.
 3. The sequence of operation by the controls manufacturer. Provide control diagrams by the manufacturer, modified to reflect the as-built, as-installed condition.
 4. Include general assembly contract drawings, sections, and photographic views as necessary to completely depict and properly identify the equipment. Indicate the dimensions, weight, capacity, and design conditions for the equipment.
- B. Include detailed information to allow for the proper installation, calibration, testing, preventative, and corrective maintenance procedures in the second section of the manual or of each section of the manual information if the manual covers a multi-component equipment system. This information should include the following:
1. Maintenance instructions including assembly, installation, alignment, clearances, tolerances, and interfacing equipment requirements, adjustment, and checking instructions. Include any special rigging required to place the equipment into place, and any special test equipment required to place the equipment in service.
 2. A safety subsection which addresses all safety and tag-out procedures necessary to safely operate and maintain the equipment.
 3. Lubrication schedule and lubrication procedures. Include a cross reference for recommended lubrication products.
 4. Troubleshooting guide.
 5. A table showing the schedule of routine maintenance requirements and seasonal work which is not performed at a set frequency. Preventative maintenance tasking must address:
 - a. Daily/weekly inspections performed by operations personnel;
 - b. Routine preventative maintenance scheduled weekly, monthly, quarterly, semi-annually, or annually through major overhauls by maintenance personnel; and
 - c. Predictive maintenance work such as alignment, analysis of the equipment, vibration, flow, oil sampling, etc.
 6. Description of sequence of operation by the control manufacturer.
 7. Warnings for detrimental maintenance practices.
 8. Detailed corrective maintenance procedures including:
 - a. Detail equipment for complete disassembly and assembly;
 - b. Cross-sectional drawings or exploded views with all parts numbered to correspond with the numbers in the parts list to permit identification of the various parts;
 - c. A table of normal clearances, diameters, thickness of new parts, and limits permissible for wearing parts; and
 - d. List torque settings for nuts, bolts, and fasteners when critical to the equipment's performance.

- C. Include all necessary diagrammatic piping and wiring diagrams and miscellaneous contract drawings and equipment in the third section of the manual or of each section of the manual if the manual covers a multi-component equipment system.
- D. Provide spare parts information in the fourth section of the manual including:
 - 1. Part numbers for ordering new parts;
 - 2. Assembly illustrations showing an exploded view of the complex parts of the product;
 - 3. Predicted life of parts subject to wear;
 - 4. List of the manufacturer's recommended spare parts, current prices with effective date, and number of parts recommended for storage;
 - 5. Directory of a local source of supply for parts with company name, address, and telephone number;
 - 6. Complete nomenclature and list of commercial replacement parts; and
 - 7. Complete list of spare parts, spare equipment, tools, and materials that are turned over to the Owner.
- E. Provide statistical information from the original equipment manufacturer as to performance such as pump curves, flow charts insulation resistance, calibration, or test data sheets in the fifth section of the manual, including all field testing records used to verify actual performance.
- F. Provide equipment name plate data installed on equipment and valves and equipment data sheets as required and furnished by the Owner in the sixth section of the manual.
- G. Provide a copy of warranties and the date the warranty expires for equipment in the seventh section of the manual.

3.03 ELECTRICAL AND ELECTRONICS SYSTEMS MANUAL

- A. Provide all of the information listed in Paragraph 3.02 as appropriate and include the following information:
 - 1. Control schematics and point to point wiring diagrams prepared for field installation;
 - 2. Circuit directories of panel boards and terminal strips and as installed color coded wiring diagrams; and
 - 3. Other information as may be required by the individual Specification Sections.

3.04 ARCHITECTURAL PRODUCTS MANUAL

- A. Provide the following information:
 - 1. Information required for ordering replacement products;
 - 2. Instructions for care and maintenance;
 - 3. List of the manufacturer's recommended lubricants;
 - 4. The manufacturer's recommendations for types of cleaning agents and methods;

- 5. Cautions against cleaning agents and methods that are detrimental to the product;
and
- 6. Recommended maintenance and cleaning schedule.
- B. Final balancing reports for mechanical systems.
- C. Other information as may be required by the individual Specification Sections.

3.05 LIST OF SERVICE ORGANIZATIONS

- A. Provide a directory of authorized service organizations with company name, address, telephone number, email address, and the contact person for warranty repair.

END OF SECTION

01 33 05 CONSTRUCTION PROGRESS SCHEDULE

PART 1 - GENERAL

1.01 SUMMARY

- A. Prepare and submit a Progress Schedule for the Work and update the schedule on a monthly basis for the duration of the Project.
- B. Provide Progress Schedule in adequate detail to allow Owner to monitor progress and to relate submittal processing to sequential activities of the Work.
- C. Incorporate Contract Milestones into the schedule and show activities leading to achievement of these milestones.
- D. Assume complete responsibility for maintaining the progress of the Work per the Progress Schedule submitted.

1.02 DOCUMENTATION

- A. Submit the schedules to the Construction Manager. Send all documents in digital format for processing.
- B. Do not leave any blanks incomplete. If information is not applicable, enter NA in the space provided.
- C. Provide schedules, schedule updates and revisions to the Construction Manager in electronic format in its originating software and in Portable Document Format (PDF) as required by Section 01 33 00 "Document Management."
- D. Submit a preliminary Progress Schedule at the pre-construction conference.
- E. Submit a detailed Progress Schedule at least 10 days prior to the first payment request.
- F. Submit Progress Schedule updates monthly within 10 days after submitting Applications for Payment to indicate the progress made on the Project to the closing date for the Application for Payment. Failure to submit Progress Schedules will cause delay in the review and approval of subsequent Applications for Payment.

1.03 PROGRESS SCHEDULE REQUIREMENTS

- A. Progress Schedule is to be in adequate detail to:
 - 1. Ensure adequate planning, scheduling, and reporting during the execution of the Work;
 - 2. Ensure the coordination of the Work of the Contractor and the various Subcontractors and Suppliers;
 - 3. Monitor the progress of the Work; and
 - 4. Evaluate the impact of proposed changes to the Contract Times and Project Schedule.
- B. Provide personnel with 5 years' minimum experience in scheduling construction work comparable to this Project. Prepare the Progress Schedule using acceptable scheduling software.

- C. Provide the Progress Schedule in the form of a computer-generated critical path schedule which includes Work to be performed on the Project. It is intended that the Progress Schedule accomplish the following:
 - 1. Give early warning of delays in time for correction.
 - 2. Provide detailed plans for the execution of the Work in the form of future activities and events in sequential relationships.
 - 3. Establish relationships of significant planned Work activities and provide a logical sequence for planned Work activities.
 - 4. Provide continuous current status information.
 - 5. Allow analysis of the Contractor's program for the completion of the Project.
 - 6. Permit schedules to be revised when the existing schedule is not achievable.
 - 7. Log the progress of the Work as it actually occurs.
- D. Provide a time-scaled horizontal bar chart which indicates graphically the Work scheduled at any time during the Project. The chart is to indicate:
 - 1. Complete sequence of construction by activity;
 - 2. Identification of the activity by structure, location, and type of Work;
 - 3. Chronological order of the start of each item of Work;
 - 4. The activity start and stop dates;
 - 5. The activity duration; and production rates used to determine the duration;
 - 6. Successor and predecessor relationships for each activity;
 - 7. A clearly indicated single critical path; and
 - 8. Projected percentage of completion, based on dollar value of the Work included in each activity as of the first day of each month.
- E. Provide a Progress Schedule for Submittals:
 - 1. Indicate the specific dates each document is to be delivered to the Construction Manager.
 - 2. Allow a reasonable time to review each document, taking into consideration the size and complexity of the document, other documents being processed, and other factors that may affect review time.
 - 3. Include time for making revisions to the Shop Drawings and resubmitting the Shop Drawing for at least a second review.
 - 4. Assume a 14-day review cycle for each time a Shop Drawing is submitted for review unless a longer period is indicated in the Contract Documents or provided by the Construction Manager.
 - 5. Contractor is responsible for delays associated with additional time required to review incomplete or erroneous documents and for time lost when documents are submitted for products that do not meet specification requirements.

1.04 PROGRESS SCHEDULE REVISIONS

- A. Revise the Progress Schedule if it appears that the schedule no longer represents the actual progress of the Work.
 - 1. Submit a Plan of Action for schedule recovery if the Progress Schedule or earned value analysis indicates that the Project is more than 30 days behind schedule. The report is to include:
 - a. Number of days behind schedule;
 - b. Narrative description of the steps to be taken to bring the Project back on schedule; and
 - c. Anticipated time required to bring the Project back on schedule.
 - 2. Submit a revised Progress Schedule indicating the action that the Contractor proposes to take to bring the Project back on schedule.
- B. Revise the Progress Schedule to indicate any adjustments in Contract Times approved by a Modification.
 - 1. Include a revised Progress Schedule with Change Proposals if a change in Contract Times is requested.
 - 2. Construction Manager will deem any Change Proposal that does not have a revised Progress Schedule and request for a change in Contract Times as having no impact on the ability of the Contractor to complete the Project within the Contract Times.
- C. Updating the Progress Schedule to reflect actual progress is not considered a revision to the schedule.
- D. Applications for Payment will not be recommended for payment without a revised Progress Schedule and if required, the report indicating the Contractor's plan for bringing the Project back on schedule.

1.05 FLOAT TIME

- A. Define float time as the amount of time between the earliest start date and the latest start date of a chain of activities on the construction schedule.
- B. Float time is not for the exclusive use or benefit of either the Contractor or Owner.
- C. Where several subsystems each have a critical path, the subsystem with the longest time of completion is the critical path and float time is to be assigned to other subsystems.
- D. Schedule completion date must be the same as the Contract completion date. Time between the end of construction and the Contract completion date is float time.

1.06 MODIFICATION OF CONTRACT TIMES

- A. Contract Times cannot be changed by the submission of a Progress Schedule. Contract Times can only be modified by a Change Order or Contract Amendment.
- B. Submit a Change Proposal for any proposed change in Contract Times, and include justification for the change in accordance with the provisions of the Contract Documents.

1.07 NEAR-TERM LOOK AHEAD SCHEDULES

- A. Provide a near-term look ahead schedule (NTLA Schedule) every 30 days, typically at periodic coordination meetings, using the form provided by the Construction Manager which shows the days of planned activity for the following:
 - 1. Submittals to be provided and day of anticipated return;
 - 2. Equipment and material deliveries;
 - 3. Arrival and departure of key construction equipment; and
 - 4. Activities for the Contractor and each Subcontractor.
- B. Coordinate NTLA Schedule with Project Schedule. Submit a report with each NTLA Schedule identifying deviations from the Project Schedule.
- C. Submit a report of near-term work planned in the previous NTLA Schedule that was delayed or not executed by marking actual activity on the previous near term look ahead schedule. Provide explanation of why planned work was not executed and plan to execute in the future and regain time lost.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 33 06 GRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.01 SUMMARY

- A. Furnish an adequate number of photographs of the Site to clearly depict the completed Project.
 - 1. Provide a minimum of four different views.
 - 2. Photograph a panoramic view of the entire Site.
 - 3. Photograph all significant areas of completed construction.
 - 4. Do not take completion photographs until all construction trailers, excess materials, trash, and debris have been removed.
 - 5. Employ a professional photographer approved by the Construction Manager to photograph the Project.
- B. Provide video recordings of the Site.
 - 1. Record the condition of all existing facilities in or abutting the construction area (right-of-way) including streets, curb and gutter, utilities, driveways, fencing, landscaping, etc., prior the beginning of construction. Provide one copy of the dated and labeled recording to the Construction Manager before the start of construction. Provide additional recording as directed by the Construction Manager if the recording provided is not considered suitable for the purpose of recording pre-existing conditions.
 - 2. Provide a video recording of the Site after the Project is complete and all construction trailers, excess materials, trash, and debris have been removed. Provide a 360-degree view of the Project from a consistent height and angle.
 - 3. Format must allow photographic still shots to be extracted from the video recording.
- C. All photographs and video recordings are to become the property of the Owner. Photographs or recordings may not be used for public or private publication or display without the written consent of the Owner.
- D. Unmanned Aerial Vehicles used for aerial photography must be registered and piloted by licensed individuals in accordance with Laws and Regulations.

1.02 DOCUMENTATION

- A. Submit photographic documentation in accordance with Section 01 33 00 "Document Management."

1.03 QUALITY ASSURANCE

- A. Provide clear photographs and video recordings taken with proper exposure. View photographs and video recordings in the field and take new photographs or video recordings immediately if photos of an adequate print quality cannot be produced or video

quality is not adequate. Provide photographs with adequate quality and resolution to permit enlargements.

PART 2 - PRODUCTS

2.01 PHOTOGRAPHS

- A. Provide photographs in digital format with a minimum resolution of 1280x960, accomplished without a digital zoom.
- B. Take photographs at locations acceptable to the Construction Manager.
- C. Provide a digital copy of each photograph taken.
- D. Identify each photograph with:
 - 1. Name of the Project.
 - 2. Date, time, location, and orientation of the exposure.
 - 3. Description of the subject of photograph.

2.02 VIDEO RECORDING

- A. Provide video recordings in digital format that can be played with Windows Media Player in full screen mode without loss of resolution.
- B. Identify Project on video by audio or visual means.
- C. Provide video with file size that does not exceed 1 GB.
- D. Provide video resolution of at least 1080p.
- E. The quality of the video must be adequate to determine the existing conditions of the construction area. Camera panning must be performed while at rest; do not pan the camera while walking or driving. Camera pans should be performed at intervals to clearly view the entire construction area.
- F. Construction stationing is to be annotated in the video.
- G. The entire construction area recording must be submitted at once. Sections submitted separately will not be accepted.
- H. Site components must be video recorded in an organized sequential order with major components identified.

PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 35 00 SPECIAL PROCEDURES

PART 1 - GENERAL

1.01 CRITICAL OPERATIONS

- A. Owner has identified critical operations that must not be out of service longer than the designated maximum out of service time and/or must be performed only during the designated times. These have been identified in the table below:

Critical Operation	Max. Time Out of Operation	Hours Operation Can Be Shut Down	Liquidated Damages (\$/hour)
Connection to existing water lines	8 hours (each)	8am-5pm	\$500/hr
Bore and Connection to Independence St. (STA 9+45 to 10+24)	30 days	TCP for Independence shutdown and detour	\$1,000/day

- B. Submit a written Plan of Action per Section 01 31 13 "Project Administration" for approval for critical operations.
- C. Work affecting critical operations is to be performed on a 24-hour a day basis until Owner's normal operations have been restored.
- D. Provide additional manpower and equipment as required to complete the Work affecting critical operations within the allotted time.
- E. Liquidated damages will be assessed if Work on critical operations is not completed within the time indicated.
1. These items are critical to the supply of water throughout the City's distribution system as well as ease of travel to the general public.
 2. Loss of supply of water throughout the City's distribution system as well as ease of travel to the general public can subject the Owner to loss of revenue, additional operations cost, and fines from regulatory agencies.
 3. Liquidated damages have been established for each critical operation.
- F. Designated Critical Operations are described in more detail as follows:
1. Intersection Closure – Intersection closure and detour at E. Independence St. and N. Minnesota Ave. shall not be closed for more than 30 days. All boring, tapping sleeve connection, fire hydrant installation, pipe disinfection, hydrostatic testing and capping of existing water line shall all be completed within the 30-day allowable window. Location of critical operations are as described by the stationing below.
 - a. STA 9+45 to STA 10+24

PART 2 - PRODUCTS (NOT USED)
PART 3 - EXECUTION (NOT USED)

END OF SECTION

01 40 00 QUALITY MANAGEMENT

PART 1 - GENERAL

1.01 OVERVIEW

- A. Quality management refers to the overall process of delivering a completed Project to the Owner that complies with the requirements of the Contract Documents. Quality management applies to documentation, products, services, and the Work.
- B. Contractor is responsible for the quality of documentation, products, services, and the Work provided.
 - 1. Contractor is to integrate quality control procedures into the execution of the Work that are adequate to produce a Project that meets the requirements of the Contract Documents, while minimizing loss of time and increased costs. Contractor is solely responsible for time and cost impacts of correcting Defective Work.
 - 2. Contractor is to provide all testing and inspection required to control the quality of the Work in progress to determine that completed Work will comply with the requirements of the Contract Documents.
 - 3. Contractor is to provide verification or acceptance testing as required by the Contract Documents to demonstrate that the completed Work complies with the requirements of the Contract Documents.

1.02 STANDARDS

- A. Provide testing laboratories that comply with the American Council of Independent Laboratories (ACIL) "Recommended Requirements for Independent Laboratory Qualifications."
- B. Perform testing in accordance with the published standards and procedures for testing listed in the Specifications and applicable Laws and Regulations.

1.03 DOCUMENTATION

- A. Provide documentation which includes:
 - 1. Contractor's Quality Management Plan that establishes the methods of ensuring compliance with the Contract Documents. Submit this plan as Product Data per Section 01 31 13 "Project Administration."
 - 2. A statement of qualifications for any proposed testing laboratory that includes a list of the engineers and technical staff that will provide testing services on the Project, descriptions of the qualifications of these individuals, list of tests that can be performed, equipment used with date of last certification, and a list of recent projects for which testing has been performed with references for those projects.
 - 3. Certified Test Reports for products to be incorporated into the Project. Provide reports to indicate that the proposed products comply with the Contract Documents or indicate that the proposed products do not comply with the Contract Documents and why those products do not comply. Submit Certified Test Reports as part of a Shop Drawing submitted per Section 01 33 02 "Shop Drawings."

4. Certified Test Reports for inspections and testing required in this Section and in other Sections of the Specifications. Provide reports to indicate that the Work complies with the Contract Documents or indicate that the Work does not comply with the Contract Documents and why the Work does not comply. Submit these test reports on forms provided by the Construction Manager per Section 01 33 00 "Document Management."
5. Certified Test Reports of Defective Work and Certified Test Reports documenting that successful corrective action has produced Work that complies with the Contract Documents. Maintain a register listing Defective Work and record when corrective action has produced Work that complies with the Contract Documents. Present this Defective Work register as part of the Quality Report at progress meetings as described in Paragraph 1.05.E. Incorporate this register in the closeout documentation per Section 01 70 00 "Execution and Closeout Requirements" to demonstrate that all Defective Work has been corrected.

1.04 OWNER'S QUALITY MANAGEMENT ACTIVITIES

- A. Owner may perform its own verification testing independent of the Contractor to verify the results of the Contractor's Work complies with the requirements of the Contract Documents. Performance or non-performance of verification activities by the Owner:
 1. Does not relieve the Contractor of its responsibility to provide Work and furnish products that comply with the requirements of the Contract Documents;
 2. Does not relieve the Contractor of its responsibility to provide adequate quality control measures to produce quality documents, products, services, or Work;
 3. Does not relieve the Contractor of its responsibility for damage to or loss of Work or products before Owner's acceptance; and
 4. Does not affect the continuing rights of the Owner after acceptance of the completed Work.
- B. The Work is subject to observations or testing at any time by the OPT. Products which have been tested or inspected and accepted by the Owner at a supply source or staging area may be inspected or tested again by the OPT before, during, or after incorporation into the Work and rejected if products do not comply with the Contract Documents.
- C. Verification testing performed by the OPT will be paid for by the Owner, except for testing related to Defective Work as discussed in Paragraph 3.03.

1.05 CONTRACTOR'S RESPONSIBILITIES

- A. Provide a Contractor's Quality Control Plan (CQCP) outlining testing to be provided by the Contractor per Paragraph 1.07.
- B. Implement the CQCP to provide Work that complies with the requirements of the Contract Documents.
 1. Provide quality documents meeting the requirements of the Contract Documents.
 2. Provide services meeting the requirements of the Contract Documents.

3. Provide the services of a Construction Materials Inspection and Testing (CMIT) provider meeting the requirements of this Section to provide testing required by the Contract Documents to demonstrate that products proposed for the Project in Shop Drawings and Product Data fully comply with the Contract Documents.
4. Inspect and test products to be incorporated into the Project to identify defects before installing them. Do not install Defective products. Conspicuously mark Defective products and remove from the Site. If products are installed before the defect is recognized, remove the Defective products, mark them as Defective and remove them from the Site when the defect is recognized.
5. Integrate production quality control measures into construction activities to produce Work meeting the requirements of the Contract Documents. Inspect self-performed Work and the Work of Subcontractors and Suppliers to identify defects. Correct or replace Defective Work.
6. Provide facilities, equipment, and Samples required for inspections and tests.
 - a. Give the Construction Manager adequate notice before proceeding with Work that would interfere with inspections or testing.
 - b. Notify the Construction Manager and CMIT provider prior to the time that testing is required, providing adequate lead time to allow arrangements for inspections or testing to be performed.
 - c. Do not proceed with Work that would impact the ability to correct defects, or with Work that would require that it be removed to correct defects, until testing is complete, and test results indicate that the corrected Work is acceptable.
 - d. Provide safe access for all CMIT activities, including those to be conducted by the OPT.
 - e. Cooperate fully with the performance of sampling, inspection, and testing. Provide personnel to assist with sampling or to assist in making inspections and field tests.
 - f. Provide Samples and products in adequate quantities for testing at the Site or at the production source of the product for testing.
 - g. Provide facilities required to store and cure test Samples.
 - h. Provide adequate lighting for inspections.
- C. Perform tests as indicated in Contract Documents. All verification testing is to be observed by the Construction Manager or its designated representative.
- D. Submit test reports to the Construction Manager.
- E. Provide an update on quality control activities performed the previous month and planned for the coming month at monthly progress meetings required by Section 01 31 13 "Project Administration."
- F. Determine testing or inspections required to implement the CQCP. Include costs for additional testing and inspections required to meet the Contractor's quality control obligations in the Contract Price.

1.06 CONTRACTOR'S QUALITY CONTROL MANAGER

- A. Provide a Quality Control Manager for the Project. Quality Control Manager must have authority to reject Defective Work, redirect the efforts of the Contractor, Subcontractor and Suppliers to correct Defective Work, and implement steps to prevent future Defective Work.
- B. The resident superintendent or an approved assistant can serve as Quality Control Manager, provided other duties will allow adequate time to serve in this capacity.

1.07 CONTRACTOR'S QUALITY CONTROL PLAN

- A. Provide a CQCP that describes testing and inspections for Work performed at the Site and at remote locations. Include Work by Subcontractors and Suppliers. The CQCP is to include:
 - 1. A description of the quality control organization, including an organization chart showing lines of authority to control the quality of Work.
 - 2. Documentation describing name, qualifications (in resume format), duties, responsibilities, and level of authority of the Quality Control Manager.
 - 3. The name, qualifications (in resume format), duties, responsibilities, and authorities of other persons assigned a quality control function.
 - 4. Procedures for scheduling, reviewing, certifying, and managing documentation including documentation provided by Subcontractors and Suppliers.
 - 5. Control, verification, and acceptance testing procedures for each specific test. Include:
 - a. Name of tests to be performed;
 - b. Specification paragraph requiring test;
 - c. Parameters of Work to be tested;
 - d. Test frequency;
 - e. Persons responsible for each test; and
 - f. Applicable industry testing standards and laboratory facilities to be used for the test.
 - 6. Procedures for tracking and documenting quality management efforts per Paragraph 1.03.
 - 7. Reporting procedures which incorporate the use of forms provided by the Construction Manager.
 - 8. The name of the proposed testing laboratories along with documentation of qualifications per Paragraph 1.03.
- B. Use the Contractor's Quality Control Plan Checklist provided by the Construction Manager to review the CQCP before submitting and include a copy of the completed checklist with the CQCP. Do not begin Work until the CQCP is accepted. Submit an interim plan covering only the portion of Work to be performed if the Contractor plans to begin Work prior to submitting the complete CQCP for the Project. Do not begin Work on other parts of the Project until the complete CQCP is accepted.

- C. Meet with the OPT 7 days after CQCP is submitted and before start of construction to discuss the CQCP.
- D. Notify the Construction Manager of any changes to the CQCP or quality control personnel.

1.08 CONTRACTOR'S USE OF OWNER'S TEST REPORTS

- A. Contractor will receive copies of all test reports documenting the Owner's verification tests. Contractor is entitled to rely on the accuracy of these tests results and use these as part of its quality control efforts.

1.09 LIMITATION OF AUTHORITY OF THE TESTING LABORATORY

- A. The testing laboratory representatives are limited to providing testing services and interpreting the results of the test performed.
- B. The testing laboratory is not authorized to:
 - 1. Alter the requirements of the Contract Documents;
 - 2. Accept or reject any portion of the Work;
 - 3. Perform any of the duties of the Contractor; or
 - 4. Direct or stop the Work.

1.10 TEST REPORTS

- A. Certified Test Reports are to be prepared for all tests.
 - 1. Tests performed by testing laboratories may be submitted on their standard test report forms if acceptable to the Owner using the process directed by the Construction Manager. These reports must include the following:
 - a. Name of the Owner, Project title and number, and name of the Contractor;
 - b. Name, address, and telephone number of the laboratory;
 - c. Name and signature of the laboratory personnel performing the test;
 - d. Description of the product being sampled or tested;
 - e. Date and time of sampling, inspection, and testing;
 - f. Date the report was issued;
 - g. Description of the test performed;
 - h. Weather conditions and temperature at time of test or sampling;
 - i. Location at the Site or structure where the test was taken;
 - j. Standard or test procedure used in making the test;
 - k. A description of the results of the test;
 - l. Statement of compliance or non-compliance with the Contract Documents; and
 - m. Interpretations of test results, if appropriate.

2. Submit reports on tests performed by the Contractor, Subcontractors, or Suppliers as directed by the Construction Manager.
- B. Submit test reports as directed by the Construction Manager within 24 hours of completing the test. Flag tests reports with results that do not comply with Contract Documents for immediate attention. Notify the Construction Manager, using acceptable means other than the test report, immediately of any test that fails to comply with the Contract Documents.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Handle and protect test specimens of products and construction materials at the Site in accordance with recognized test procedures. Provide facilities for storing, curing, and processing test specimens as required by test standards to maintain the integrity of Samples. Transport test specimens in a manner to prevent damage to specimens while in transit.

PART 2 - PRODUCTS

2.01 TESTING APPARATUS

- A. Furnish testing apparatus and related accessories necessary to perform the tests.

2.02 SAMPLE PRODUCTS

- A. Provide Samples of products in adequate quantity for testing.

PART 3 - EXECUTION

3.01 IMPLEMENTING CONTRACTOR'S QUALITY CONTROL PLAN

- A. Perform quality control observations and testing as required in each Section of the Specifications and where indicated on the Drawings.
- B. Include the phases listed below for each definable work task. A definable work task is one which is separate and distinct from other tasks, has separate control requirements, may be provided by different trades or disciplines, or may be work by the same trade in a different environment.
 1. Planning Phase: Perform the following before beginning each definable work task:
 - a. Review the Contract Documents.
 - b. Review documents the Contractor will submit and determine that they are complete in accordance with the Contract Documents.
 - c. Check to ensure that all materials and/or equipment have been tested, submitted, and approved.
 - d. Examine the work area to ensure that all required preliminary Work has been completed and complies with the Contract Documents.
 - e. Examine required materials, equipment, and sample Work to ensure that they are on hand, conform to Contract Documents, Shop Drawings and Product Data, and are properly stored.

- f. Review requirements for quality control inspection and testing.
 - g. Discuss procedures for controlling quality of the Work. Document construction tolerances and workmanship standards for the work task.
 - h. Check that the portion of the plan for the Work to be performed incorporates document review comments.
 - i. Discuss results of planning phase with the Construction Manager. Conduct a meeting attended by the Construction Manager, Quality Control Manager, superintendent, other quality control personnel as applicable, and the foreman responsible for the work task. Instruct applicable workers as to the acceptable level of workmanship required to meet the requirements of the Contract Documents. Document the results of the planning phase actions by separate meeting minutes prepared by the Quality Control Manager and attached to the quality control report.
 - j. Do not move to the next phase unless results of investigations required for the planning phase indicate that requirements have been met.
- 2. Work Phase: Complete this phase after the planning phase.
 - a. Notify the Construction Manager at least 1 week in advance of beginning the Work and discuss the review of the planning phase effort to indicate that requirements have been met.
 - b. Check the Work to ensure that it is in full compliance with the Contract Documents.
 - c. Verify adequacy of controls to ensure full compliance with the Contract Documents. Verify required control inspection and testing is performed.
 - d. Verify that established levels of workmanship meet acceptable workmanship standards. Compare with required Sample panels as appropriate.
 - e. Repeat the work phase for each new crew to work on-site, or any time acceptable specified quality standards are not being met.
 - 3. Follow-Up Phase: Perform daily checks to ensure control activities, including control testing, are providing continued compliance with contract requirements.
 - a. Make checks daily and record observations in the quality control documentation.
 - b. Conduct follow-up checks and correct all defects prior to the start of additional work tasks that may be affected by the Defective Work. Do not build upon nor conceal Defective Work.
 - c. Conduct a review of the Work at least 1 month prior to the expiration of the correction period prescribed in the General Conditions with the OPT. Correct defects as noted during the review.
- C. Conduct additional planning and work phases if:
- 1. The quality of on-going Work is unacceptable;
 - 2. Changes are made in applicable quality control staff, on-site production supervision, or crews;

3. Work on a task is resumed after a substantial period of inactivity; or
4. Other quality problems develop.

3.02 DEFECTIVE WORK

- A. Immediately correct any Defective Work or notify the Construction Manager why the Work is not to be corrected immediately and when corrective action will be completed.
- B. Work performed that is connected or adjacent to Defective Work or Work that would have to be removed to correct Defective Work is also considered to be Defective. Contractor is responsible for all costs associated with replacing any acceptable Work that must be removed, or might be damaged by corrective actions.
- C. Document Defective Work, corrective actions taken to correct defects, and that corrected Work complies with the Contract Documents.
- D. Implement countermeasures to prevent future Defective Work.
- E. No payment will be made for Defective Work. Remove Work from the Application for Payment if Work paid for on a previous Application for Payment is found to be Defective.
- F. Owner will withhold payment for Defective Work or Work that has not been tested or inspected in accordance with the CQCP or the Contract Documents.

3.03 VERIFICATION TESTING FOR CORRECTED DEFECTS

- A. Provide verification testing on corrected Work when corrective action is complete to demonstrate that the corrected Work complies with the Contract Documents. Conduct the same tests or inspections used to determine that the original Work was Defective. Different tests or methods may be used if approved by the Owner. Document that Defective Work has been corrected with the Construction Manager.
- B. Pay for verification testing until Work meets quality requirement set forth in the Contract Documents. OPT may perform verification testing as part of the Owner's Quality Management Program and impose a set-off to recover the cost for this testing.

END OF SECTION

01 57 00 TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide labor, materials, equipment, and incidentals necessary to construct temporary facilities to provide and maintain control over environmental conditions at the Site. Remove temporary facilities when no longer needed.
- B. Construct temporary impounding works, channels, diversions, furnishing, and operation of pumps, installing piping and fittings, and other construction for control of conditions at the Site. Remove temporary controls at the end of the Project.

1.02 DOCUMENTATION

- A. Provide Shop Drawings in accordance with Section 01 33 02 "Shop Drawings."
- B. Provide copies of notices, records, and reports required by the Contract Documents or Laws and Regulations as Product Data in accordance with Section 01 31 13 "Project Administration."

1.03 QUALITY ASSURANCE

- A. Construct and maintain temporary controls with adequate workmanship using durable materials to provide effective environmental management systems meeting the requirements of the Contract Documents and Laws and Regulations. Use materials that require minimal maintenance to prevent disruption of construction activities while providing adequate protection of the environment.
- B. Periodically inspect systems to determine that they are meeting the requirements of the Contract Documents.

1.04 POLLUTION CONTROL

- A. Prevent the contamination of soil, water, or atmosphere by the discharge of noxious substances from construction operations. Provide adequate measures to prevent the creation of noxious air-borne pollutants. Prevent dispersal of pollutants into the atmosphere. Do not dump or otherwise discharge noxious or harmful fluids into drains or sewers, nor allow noxious liquids to contaminate public waterways in any manner.
- B. Provide equipment and personnel and perform emergency measures necessary to contain any spillage.
 - 1. Contain chemicals in protective areas and do not dump on soil. Dispose of such materials at off-site locations in an acceptable manner.
 - 2. Excavate contaminated soil and dispose at an off-site location if contamination of the soil does occur. Fill resulting excavations with suitable backfill and compact to the density of the surrounding undisturbed soil.
 - 3. Provide documentation to the Owner which states the nature and strength of the contaminant, method of disposal, and the location of the disposal site.

4. Comply with Laws and Regulations regarding the disposal of pollutants.
- C. Groundwater or run-off water which has come into contact with noxious chemicals, sludge, or contaminated soil is considered contaminated. Do not allow contaminated water to enter streams or water courses, leave the Site in a non-contained form, or enter non-contaminated areas of the Site.
 1. Construct temporary holding ponds or take other precautions and measures as required to contain the contaminated water and pump to a designated storage area.
 2. Wash any equipment used for handling contaminated water or soil within contaminated areas three times with uncontaminated water prior to using such equipment in an uncontaminated area. Dispose of wash water used to wash such equipment as contaminated water.

1.05 EARTH CONTROL

- A. Remove excess soil, spoil materials, and other earth not required for backfill. Control stockpiled materials to eliminate interference with Contractor and Owner's operations.
- B. Dispose of excess earth off the Site. Provide written approval from the property owner for soils deposited on private property as Product Data per Section 01 31 13 "Project Administration." Obtain approval of the OPT if this disposal impacts the use of Site or other easements.

1.06 AIR POLLUTION CONTROL

- A. Air Pollution Watch Days:
 1. Air Pollution Watch Days (APWD) may occur in the following times:
 - a. Typical Ozone Season: May 1 through October 31.
 - b. Critical Emission Time: 6:00 a.m. to 10:00 a.m.
 2. Watch Days:
 - a. State or local environmental regulatory agencies, in coordination with the National Weather Service, may designate the following day as an APWD by 3:00 p.m. on the prior afternoon.
 - b. Begin work after 10:00 a.m. on designated APWD if work requires the use of heavy construction equipment for run times in excess of 1 hour prior to 10:00 a.m. Heavy construction equipment may be used prior to 10:00 a.m. if equipment is certified by EPA as "Low Emitting" or equipment burns Ultra Low Sulfur Diesel (ULSD), diesel emulsions, or alternative fuels such as CNG.
- B. Obtain air permit for construction activities per requirements of Laws and Regulations.

1.07 TEMPORARY STORMWATER POLLUTION CONTROL

- A. Provide temporary stormwater pollution control per Section 01 57 23 "Temporary Stormwater Pollution Control."

1.08 MANAGEMENT OF WATER

- A. Manage water resulting from rains or ground water at the Site. Maintain trenches and excavations free of water at all times.
- B. Lower the water table in the construction area by acceptable means if necessary to maintain a dry and workable condition at all times. Provide drains, sumps, casings, well points, and other water control devices as necessary to remove excess water.
- C. Provide continuous operation of water management actions. Maintain standby equipment to provide proper and continuous operation for water management.
- D. Ensure that water drainage does not damage adjacent property. Divert water into the same natural watercourse in which its headwaters are located, or other natural stream or waterway as approved by the Owner. Assume responsibility for the discharge of water from the Site.
- E. Remove the temporary construction and restore the Site in a manner acceptable to the Construction Manager and to match surrounding material at the conclusion of the Work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide materials that comply with Laws and Regulations.

PART 3 - EXECUTION

3.01 CONSTRUCTING, MAINTAINING, AND REMOVING TEMPORARY CONTROLS

- A. Construct temporary controls in accordance with Laws and Regulations.
- B. Maintain controls in accordance with regulatory requirements where applicable or in accordance with the requirements of the Contract Documents.
- C. Remove temporary control when no longer required, but before the Project is complete. Correct any damage or pollution that occurs as the result of removing controls while they are still required.

END OF SECTION

01 57 23 TEMPORARY STORMWATER POLLUTION CONTROL

PART 1 - GENERAL

1.01 SUMMARY

- A. Furnish labor, materials, equipment, and incidentals necessary to provide stormwater pollution prevention for the duration of the construction period including furnishing, installing, and maintaining erosion and sediment control structures and procedures and properly removing the features when no longer required.
- B. Develop, implement, and maintain a stormwater pollution prevention plan (SWPPP) in compliance with local, state, and federal Laws and Regulations. Provide preventive measures to keep sediment and other pollutants from the construction activity from entering any stormwater system, including open channels.
- C. Comply with all requirements of the Oklahoma Department of Environmental Quality (ODEQ) General Permit OKR10 for storm water discharges from construction activities under the Oklahoma Pollutant Discharge Elimination System (OPDES).
- D. File all required legal notices and obtain required permits prior to beginning any construction activity.
- E. This Section provides guidelines and Best Management Practices information for the Contractor to use in adhering to all local, state, and federal environmental Laws and Regulations with respect to stormwater pollution prevention during construction activities.

1.02 DOCUMENTATION

- A. Documentation must be provided in accordance with Section 01 33 00 "Document Management."
- B. Submit copies of required notices and reports to the Construction Manager as Product Data in accordance with Section 01 33 03 "Product Data." Retain copies of these documents at the Site for review and inspection by the OPT or regulatory agencies at all times.
- C. Submit copies of required notices to local, state, and federal authorities and any other entity as required by the General Permit and applicable Laws and Regulations.
- D. Post a copy of required notices at the Site in a location where it is readily available for viewing by the general public and local, state, and federal authorities prior to starting construction activities and maintain the posting until completion of the construction activities.
- E. Maintain copies of a schedule of major construction activities, inspection reports, and revision documentation with the SWPPP required under the General Permit.
- F. Provide schedules in accordance with Paragraph 3.05.

1.03 QUALITY ASSURANCE

- A. Comply with applicable requirements of all governing authorities having jurisdiction. The Specifications and the Drawings are not intended to be prescriptive but rather to convey

the intent to provide complete slope protection, erosion control, and stormwater pollution prevention for both the Owner's property and adjacent properties.

- B. Perform Work to comply with "Best Practices" as established by ODEQ or the local agency of jurisdiction.
- C. Contractor must develop and implement a SWPPP in accordance with the General Permit prior to the beginning of construction activity
- D. Contractor assumes sole responsibility for implementing, updating, and modifying the General Permit per Laws and Regulations for the SWPPP and Best Management Practices.
- E. Stormwater pollution prevention measures must be established prior to the beginning of construction and maintained during the entire length of construction until final stabilization has been achieved for the area protected.
- F. All land-disturbing activities must be planned and conducted to minimize the area to be exposed at any one time as well as time of exposure, off-site erosion, sedimentation, and adverse water quality impacts.
- G. Surface water runoff originating upgrade of an exposed area must be managed to minimize erosion and sediment loss during the period of exposure.
- H. Install measures to control both the velocity and rate of release so as to minimize erosion and sedimentation of the receiving water body (i.e. , ditch, channel, stream) in accordance with regulatory requirements and as directed by the OPT.
- I. Periodically clean out and dispose of all sediment and other pollutants as necessary to maintain adequate treatment capacity of each pollution control feature. Clean out and properly dispose of all sediment and other stormwater pollutants at the time of completion of the Work.

1.04 JOB CONDITIONS, CODES AND ORDINANCES

- A. Comply with the local codes and ordinances. If local codes and ordinances require more stringent or additional stormwater pollution prevention measures during construction beyond those required by state and federal Laws and Regulations, the Contractor must provide such measures at no additional cost.

1.05 STANDARDS

- A. The applicable provisions of the following standards apply as if written here in their entirety:
 - 1. ASTM International (ASTM):

ASTM D4632	Standard Test Method for Grab Breaking Load and Elongation of Geotextiles, 90 pounds
ASTM D4833	Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products, 60 pounds
ASTM D3786	Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, 280 psi
ASTM D4751	Standard Test Method for Determining Apparent Opening Size of a Geotextile, U.S. Sieve No. 70 (max) to No. 100 (min)

ASTM D4355	Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc-Type Apparatus
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All materials used for stormwater pollution prevention must meet the minimum design and specification requirements for commonly used sediment loss prevention and meeting all regulatory requirements. The Contractor must use appropriate control devices to protect against stormwater pollution from construction site activities.

PART 3 - EXECUTION

3.01 PREPARATION

- B. Comply with the current requirements of ODEQ General Permit OKR10 (General Storm Water Permit) set forth by the Oklahoma Department of Environmental Quality for the duration of the Project:
 - 1. Develop a Storm Water Pollution Prevention Plan meeting all requirements of the General Storm Water Permit.
 - 2. Submit of a Notice of Intent to the Oklahoma Department of Environmental Quality.
 - 3. Develop and implement appropriate Best Management Practices as established by local agencies of jurisdiction.
 - 4. Provide all monitoring and/or sampling required for reporting to the Oklahoma Department of Environmental Quality.
 - 5. Submit reports to the Oklahoma Department of Environmental Quality as required as a condition of the permit.
 - 6. Submit copies of the reports to the Engineer as Record Data in accordance with Section 01 33 00 "Submittal Procedures."
 - 7. Retain copies of these documents at the Site at all times for review and inspection by the Owner or regulatory agencies. Post a copy of the permit as required by regulations.
 - 8. Pay all costs associated with complying with the provisions of the General Storm Water Permit. Assume solely responsible for implementing, updating, and modifying the General Storm Water Permit per regulatory requirements the Storm Water Pollution Prevention Plan and Best Management Practices.
- C. Use forms required by the Oklahoma Department of Environmental Quality to file the Notice of Intent. Submit the Notice of Intent at least 2 days prior to the start of construction. Develop the Storm Water Pollution Prevention Plan prior to submitting the Notice of Intent. Provide draft copies of the Notice of Intent, Storm Water Pollution Prevention Plan, and any other pertinent Oklahoma Department of Environmental Quality

submittal documents to Owner for review prior to submittal to the Oklahoma Department of Environmental Quality.

- D. Return any property disturbed by construction activities to either specified conditions or pre-construction conditions as set forth in the Contract Documents. Provide an overall erosion and sedimentation control system that will protect all undisturbed areas and soil stockpiles/spoil areas. Implement appropriate Best Management Practices and techniques to control erosion and sedimentation and maintain these practices and techniques in effective operating condition during construction. Permanently stabilize exposed soil and fill as soon as practical during the Work.
- E. Assume sole responsibility for the means, methods, techniques, sequences, and procedures for furnishing, installing, and maintaining erosion and sedimentation control structures and procedures and overall compliance with the General Storm Water Permit. Modify the system as required to effectively control erosion and sediment.
- F. Retain copies of reports required by the General Storm Water Permit for 3 years from date of final completion.
- G. OPT may require Contractor to install stormwater pollution prevention devices and/or practices during construction in addition to those required under the approved SWPPP. Contractor must remain solely responsible for complying with all local, state, and federal Laws and Regulations.

3.02 INSTALLATION

- A. Erosion control blankets to hold seed and soil in place until vegetation is established on disturbed areas are subject to the following installation criteria:
 - 1. Prior to the installation of any erosion control matting, all rocks, dirt clods, stumps, roots, trash, and any other obstructions that would prevent the mat from lying in direct contact with the soil must be removed.
 - 2. Anchor trenching must be located along the entire perimeter of the installation area, except for small areas with less than 2 percent slope.
 - 3. Installation and anchoring must conform to the recommendations shown within the manufacturer's published literature for the erosion control blanket.
 - 4. Anchors (staples) must be a minimum of 6 inches in length and 1 inch wide. They must be made of 11-gauge wire, or equivalent, unless the ECB is intended to remain in place with final stabilization and biodegrade.
 - 5. Particular attention must be paid to joints and overlapping material. Overlap along the sides and at the ends of ECBs should be per the manufacturer's recommendations for site conditions and the type of ECB being installed. At a minimum, the end of each roll of ECB must overlap the next roll by 3 feet and the sides of rolls must overlap 4 inches.
 - 6. After installation, check blankets for uniform contact with the soil, security of the lap joints, and flushness of the staples with the ground.
- B. Silt fences for perimeter controls located downstream of disturbed areas are subject to the following installation criteria:
 - 1. Construct fences along a line of constant elevation (along a contour line if possible).

2. Maximum drainage area must be 0.25 acres per 100 linear feet of silt fence.
 3. Maximum flow to any 20-foot section of silt fence must be 1 cfs.
 4. Maximum distance of flow to silt fence must be 200 feet or less. If the slope exceeds 10 percent, the flow distance must be less than 50 feet.
 5. Maximum slope adjacent to the fence must be 2:1.
 6. Stone overflow structures or other outlet control devices must be installed at all low points along the fence or spaced at approximately 300 feet if there is no apparent low point.
 7. A 6-inch wide trench is to be cut 6 inches deep at the toe of the fence to allow the fabric to be laid below the surface and backfilled with compacted earth or gravel to prevent bypass of runoff under the fence. Fabric must overlap at abutting ends a minimum of 3 feet and must be joined such that no leakage or bypass occurs. If soil conditions prevent a minimum toe-in depth of 6 inches or installation of support post to depth of 12 inches, silt fences must not be used.
 8. Sufficient room for the operation of sediment removal equipment must be provided between the silt fence and other obstructions in order to properly maintain the fence.
 9. The last 10 feet (or more) at the ends of a line of silt fence must be turned upslope to prevent bypass of stormwater. Additional upslope runs of silt fence may be needed every 200 to 400 linear feet, depending on the traverse slope along the line of silt fence.
- C. Inlet protection for new developments that include new inlets or roads with new curb inlets or during repairs to existing roadways are subject to the following installation criteria:
1. Maintain barricades, signs, and safety features around the Work in accordance with all provisions of the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), when installing inlet protection on publicly traveled streets or in developed areas. Ensure that inlet protection is properly designed, installed, and maintained to avoid flooding of the roadway or adjacent properties and structures.
 2. Maximum depth of flow must be 8 inches or less.
 3. A 2-inch overflow gap or weir is required on all curb inlet protection devices.
 4. Positive drainage is critical in the design of inlet protection. If overflow is not provided for at the inlet, excess flows must be routed through established swales, streets, or other watercourses to minimize damage due to flooding.
 5. Filter Fabric Protection:
 - a. Filter fabric protection is appropriate where the drainage area is less than 1 acre and the basin slope is less than 5 percent.
 - b. Filter fabric, posts, and wire mesh must meet the material requirements specified in Paragraph 2.01.a.
 - c. A 6-inch wide trench is to be cut 6 inches deep at the toe of the fence to allow the fabric to be laid below the surface and backfilled with compacted earth or gravel. This entrenchment prevents any bypass of runoff under the fence.

- d. Stone overflow structures must be installed where flow to the inlet is concentrated and more than 1 cfs according to the criteria in Paragraph 2.01.
6. Block and Gravel Protection (Curb and Drop Inlets):
- a. Concrete blocks are to be placed on their sides in a single row around the perimeter of the inlet, with ends abutting.
 - b. Openings in the blocks should face outward, not upward. 1/2-inch by 1/2-inch wire mesh must then be placed over the outside face of the blocks covering the holes.
 - c. Filter stone must then be piled against the wire mesh to the top of the blocks with the base of the stone being a minimum of 18 inches from the blocks.
 - d. Alternatively, where loose stone is a concern (streets, etc.), the filter stone may be placed in appropriately sized geotextile fabric bags.
7. Excavated Impoundment Protection:
- a. Excavated impoundment protection is only applicable to drop inlets.
 - b. It should not be applied to Y inlets because it will undermine the concrete pad surrounding the inlet opening. Nor can it be used for inlets on pavement.
 - c. With this protection method, it is necessary to install weep holes to allow the impoundment to drain completely.
 - d. The impoundment must be sized such that the volume of excavation is equal to or exceeds the runoff volume from the temporary control design storm (2-year, 24-hour) for the inlet's drainage area.
 - e. The trap must have a minimum depth of 1 foot and a maximum depth of 2 feet as measured from the top of the inlet and must have side slopes of 2:1 or flatter.
8. Organic Filter Tube Protection (Curb and Drop Inlets):
- a. Organic filter tubes may be used on paved or unpaved surfaces. On paved surfaces, tubes must be secured in place by rock bags. On unpaved surfaces, the tubes must be embedded in the ground a minimum of 3 inches and staked at 4-foot spacing.
 - b. Designer must provide calculations and specify the diameter of tube to be used based on the inlet's drainage area and the flow rate of runoff to the inlet.
 - c. The minimum allowable diameter is 12 inches.
 - d. For curb protection, the diameter of the tube must be at least 2 inches less than the height of the inlet opening. The tube should not be allowed to block the entire opening, since it will clog.
 - e. The tube must be placed on 4-inch by 4-inch or 2-inch by 4-inch wire mesh to prevent the tube from sagging into the inlet. The tube should be long enough to extend a minimum of 12 inches past the curb opening on each side of the inlet.

- D. Stone outlet sediment traps (excavated or bermed) for situations where flows are concentrated in a drainage swale or channel are subject to the following installation criteria:
1. The maximum drainage area contributing to the trap must be less than 10 acres for the excavated trap, and 5 acres or less for the bermed trap. For larger drainage areas a sediment basin must be used.
 2. The minimum storage volume must be the volume of runoff from the temporary control design storm (2-year, 24-hour) for the sediment trap's drainage area.
 3. The surface area of the design storage must be 1 percent of the area draining to the device.
 4. The maximum embankment height must be 6 feet as measured from the toe of the slope on the downstream side.
 5. Minimum width of the embankment at the top must be 2 feet.
 6. Embankment slope must be 1:5:1 or flatter.
 7. The embankment must have a depressed area to serve as the outlet with a minimum width of 4 feet.
 8. A 6-inch minimum thickness layer of 1-1/2-inch filter stone must be placed on the upstream face of the embankment when stormwater runoff contains fine silt and clay particles.
 9. The embankment must consist of stone riprap or a combination of compacted fill with stone riprap. The stone may be enclosed in wire mesh or a gabion basket and anchored to the channel bottom to prevent washing away.
 10. Fill must be placed in 8-inch loose lifts (maximum) and compacted to 95 percent Standard Proctor Density at optimum moisture content using ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort.
 11. Geotextile fabric, covered with a layer of stone, must extend past the base of the embankment on the downstream side a minimum of 2 feet.
 12. The outlet must be designed to have a minimum freeboard of 6 inches at design flow.
- E. Check dams for long drainage swales or ditches to reduce erosive velocities are subject to the following installation criteria:
1. Typically, the dam height should be between 9 inches and 36 inches, depending on the material of which they are made. The height of the check dam must always be less than one-third the depth of the channel.
 2. Dams should be spaced such that the top of the downstream dam is at the same elevation as the toe of the upstream dam. On channel grades flatter than 0.4 percent, check dams should be placed at a distance that allows small pools to form between each check dam.
 3. The top of the side of the check dam must be a minimum of 12 inches higher than the middle of the dam. In addition, the side of the dams must be embedded a minimum of 18 inches into the side of the drainage ditch, swale or channel to minimize the potential for flows to erode around the side of the dam.

4. Larger flows (greater than 2-year, 24-hour design storm) must pass the check dam without causing excessive upstream flooding.
 5. Check dams should be used in conjunction with other sediment reduction techniques prior to releasing flow off-site.
 6. Rock Check Dams: Rock check dams must have a minimum top width of 2 feet with side slopes of 2:1 or flatter.
 7. Rock Bag Check Dams:
 - a. Rock bag check dams should have a minimum top width of 16 inches.
 - b. Bag length must be 24 to 30 inches, width must be 16 to 18 inches, and thickness must be 6 to 8 inches and having a minimum weight of 40 pounds.
 - c. Minimum rock bag dam height of 12 inches would consist of one row of bags stacked on top of two rows of bag. The dam must always be one more row wide than it is high, stacked pyramid fashion.
 - d. PVC pipes may be installed through the dam to allow for controlled flow through the dam. Pipe should be schedule 40 or heavier polyvinyl chloride (PVC) having a nominal internal diameter of 2 inches.
 8. Sack Gabion Check Dams:
 - a. Sack gabion check dams may be used in channels with a contributing drainage area of 5 acres or less.
 - b. Wire mesh must be one piece, wrapped around the rock, and secured to itself on the downstream side using wire ties or hog rings.
 - c. Sack gabions must be staked with 3/4-inch rebar at a maximum spacing of 3 feet. Each wire sack must have a minimum of two stakes.
 9. Organic Filter Tube Check Dams:
 - a. Organic filter tubes may be used as check dams in channels with a contributing drainage area of 5 acres or less.
 - b. Organic filter tubes must be a minimum of 12 inches in diameter.
 - c. Staking of filter tubes must be at a maximum of 4-foot spacing and must alternate through the tube and on the downstream face of the tube.
- F. Stabilized construction exits for sites in which significant truck traffic occurs on a daily basis are subject to the following installation criteria:
1. Limit site access to one route during construction, if possible; two routes for linear and larger projects.
 2. Prevent traffic from avoiding or shortcutting the full length of the construction exit by installing barriers. Barriers may consist of silt fence, construction safety fencing, or similar barriers.
 3. Design the access point(s) to be at the upslope side of the construction site. Do not place construction access at the lowest point on the construction site.

4. Stabilized Construction Exits are to be constructed such that drainage across the entrance is directed to a controlled, stabilized outlet on-site with provisions for storage, proper filtration, and removal of wash water.
5. The exit must be sloped away from the paved surface so that stormwater is not allowed to leave the Site onto roadways.
6. Minimum width of exit must be 15 feet.
7. Vehicles must not be permitted to track or drop sediment onto paved roads, streets, or parking lots. When necessary, vehicles must be cleaned to remove sediment prior to exit onto paved areas. When washing is required, it must be done on a constructed wheel wash facility that drains into an approved sediment trap or sediment basin or other sedimentation/filtration device.
8. Minimum dimensions for the exit must be as follows:

Tract Area	Min. Width of Exit	Min. Length of Exit
<1 Acre	15 feet	20 feet
≥ 1 acre but <5 Acres	25 feet	50 feet
≥5 Acres	30 feet	50 feet

- G. Install pollution control devices in a manner consistent with their designed intent.

3.03 MAINTENANCE

- A. Maintain pollution prevention control structures and procedures in full working order at all times during construction. This must include any necessary repair or replacement of items which have become damaged or ineffective. Remove sediment and other pollutants which accumulate in pollution control devices as necessary to maintain the intended design efficiency for the pollution prevention measure.
- B. Dispose properly of trash, debris, and other pollutants.
- C. Place sediment material in approved earth spoil areas or return the sediment material to the area from which it eroded.
- D. Maintain pollution prevention structures and procedures until construction is complete for the area protected and until the Site achieves final stabilization. Unless more stringently defined by local, state, or federal requirements, final stabilization is defined as achieving 70 percent of background vegetative cover or placement of permanent cover, such as concrete or asphalt.
- E. Upon completion of construction and achievement of final stabilization, properly remove the temporary pollutant control structures and complete the area as indicated. Pollution control devices made of organic materials designed to degrade naturally in place will not require removal, unless specifically required by the OPT.
- F. Erosion control blankets must be inspected regularly (at least as often as required by the General Permit) for bare spots caused by weather related events. Missing or loosened blankets must be replaced or re-anchored. Also check for excess sediment deposited from runoff. Remove sediment and/or replace blanket as necessary. In addition, determine the source of excess sediment and implement appropriate Best Management Practices to control the erosion.

- G. Silt fences must be inspected regularly (at least as often as required by the General Permit) for buildup of excess sediment, undercutting, sags, and other failures. Sediment should be removed when it reaches approximately one-half the height of the fence. In addition, determine the source of excess sediment and implement appropriate Best Management Practices to control the erosion. If the fabric becomes damaged or clogged, it must be repaired or replaced as necessary.
- H. Inlet protection must be inspected regularly (at least as often as required by the General Permit). Floatable debris and other trash caught by the inlet protection should be removed after each storm event. Sediment should also be removed from curb inlet protection after each storm event because of the limited storage area associated with curb inlets. Sediment collected at inlet protection should be removed before it reaches half the height of the protection device. Sediment should be removed from inlets with excavated impoundment protection before the volume of the excavation is reduced by 50 percent. In addition, the weep holes should be checked and kept clear of blockage. Concrete blocks, 2-inch by 4-inch boards, stakes, and other materials used to construct inlet protection should be checked for damaged and repaired or replaced if damaged. When filter fabric or organic filter tubes are used, they should be cleaned or replaced when the material becomes clogged. For systems using filter stone, when the filter stone becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Because of the potential for inlet protection to divert runoff or cause localized flooding, remove inlet protection as soon as the drainage area contributing runoff to the inlet is stabilized. Ensure that all inlet protection devices are removed at the end of the construction.
- I. The stone outlet sediment trap should be inspected regularly (at least as often as required by the General Permit) to check for clogging of the void spaces between stones. If the filter stone appears to be clogged, such that the basin will not completely drain, then the filter stone will require maintenance. If the filter stone is not completely clogged it may be raked with a garden rake to allow the water to release from the basin. If filter stone is completely clogged with mud and sediment, then the filter stone will have to be removed and replaced. Failure to keep the filter stone material properly maintained will lead to clogging of the stone riprap embankment. When this occurs, the entire stone rip-rap structure will need to be replaced. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced. Trash and debris should be removed from the trap after each storm event to prevent it from plugging the rock. Deposited sediment must be removed before the storage capacity is decreased by one-third, or sediment has reached a depth of 1 foot, whichever is less. The removed sediment must be stockpiled or redistributed in areas that are protected with erosion and sediment controls.
- J. Sediment basins should be inspected regularly (at least as often as required by the General Permit) to check for damage and to ensure that obstructions are not diminishing the effectiveness of the structure. Sediment must be removed and the basin must be re-graded to its original dimensions when the sediment storage capacity of the impoundment has been reduced by 20 percent. The removed sediment may be stockpiled or redistributed on-site in areas that are protected by erosion and sediment controls. Inspect temporary stabilization of the embankment and graded basin and the velocity dissipaters at the outlet and spillway for signs of erosion. Repair any eroded areas that are found. Install additional erosion controls if erosion is frequently evident.

- K. Check dams should be inspected regularly (at least as often as required by the General Permit). Silt must be removed when it reaches approximately one-third the height of the dam or 12 inches, whichever is less. Inspectors should monitor the edges of the dam where it meets the sides of the drainage ditch, swale, or channel for evidence of erosion due to bypass or high flows. Eroded areas must be repaired. If erosion continues to be a problem, modifications to the check dam or additional controls are needed. Care must be used when taking out rock check dams in order to remove as much rock as possible. Loose rock can create an extreme hazard during mowing operations once the area has been stabilized.
- L. Stabilized construction exits should be inspected regularly (at least as often as required by the General Permit). The stabilized construction exit must be maintained in a condition that prevents tracking or flow of sediment onto paved surfaces. Periodic re-grading and top dressing with additional stone must be done to keep the efficiency of the exit from diminishing. The rock must be re-graded when ruts appear. Additional rock must be added when soil is showing through the rock surface. Additional controls are needed if inspections reveal a properly installed and maintained exit, but tracking of soil outside the construction area is still evident. Additional controls may be daily sweeping of all soil spilled, dropped, or tracked onto public rights-of-way or the installation of a wheel cleaning system.

3.04 FIELD QUALITY CONTROL

- A. In the event of conflict between the specified requirements and stormwater pollution control laws, rules, or regulations or other local, state, or federal agencies, the more restrictive laws, rules, or regulations will apply.

3.05 SCHEDULES

- A. Prior to start of construction, submit schedules to the OPT for accomplishment of temporary and permanent erosion control work in connection with required clearing and grubbing, grading, construction, and paving. Include a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials in the submittal.

END OF SECTION

01 60 00 PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide products for this Project that comply with the requirements of this Section. Specific requirements of the detailed equipment specifications govern in the case of a conflict with the requirements of this Section.
- B. Comply with applicable specifications and standards.

1.02 DOCUMENTATION

- A. Provide documents in accordance with the Contract Documents.

1.03 QUALITY ASSURANCE

- A. Design Criteria:
 - 1. Provide products designed for structural stability and operational capability.
 - 2. Provide members designed to withstand all loads imposed by installation, erection, and operation of the product without deformation, failure, or adversely affecting the operational requirements of the product. Size and strength of materials for structural members are specified as minimums only.
 - 3. Design mechanical and electrical components for all loads, currents, stresses, and wear imposed by startup and normal operations of the equipment without deformation, failure, or adversely affecting the operation of the unit. Mechanical and electrical components specified for equipment are specified as the minimum acceptable for the equipment.
- B. Coordination:
 - 1. Provide coordination of the entire Project, including verification that structures, piping, and equipment components to be furnished and installed for this Project are compatible.
 - 2. Determine that the equipment furnished for this Project is compatible with the requirements of the Contract Documents and with the equipment and materials furnished by others.
 - 3. Provide electrical components for equipment that comply with all provisions of the Contract Documents.
 - 4. Apply protective coatings and paints to equipment in the shop that are fully compatible with the final coatings to be field applied in accordance with the Contract Documents.
- C. Adapting Substitute Products:
 - 1. The Drawings and Specifications are prepared for the specified products. Make modifications to incorporate the products into the Project if a substitution is requested

for a product is and approved in accordance with Section 01 26 00 "Change Management."

2. Do not provide a product with a physical size that exceeds the available space. Consideration may be given to the acceptance of these products or equipment if the Contractor assumes all costs necessary to incorporate the item and the OPT approves such revisions.
3. Coordinate electrical requirements for the products to be installed in the Project, including revisions in electrical equipment components wiring and other elements necessary to incorporate the component.

1.04 STANDARDS

- A. The applicable industry standards referenced in the Specifications apply as if written here in their entirety.
- B. Provide equipment manufactured using structural and miscellaneous fabricated steel conforming to the standards of the American Institute of Steel Construction, except where indicated otherwise.

1.05 WARRANTIES AND GUARANTEES

- A. Normal warranty provisions are as stated in the General Conditions and Section 01 78 36 "Warranties and Service Agreements."
- B. Correct Defective Work under the provisions of the General Conditions.
- C. Provide warranties and guarantees for periods as defined in the Contract Documents. Individual Sections of the Specifications may have more stringent warranty requirements than stated in the General Conditions. The most stringent warranty will apply in the event of conflicts within the Contract Documents.
- D. The Contract Documents may require special warranties that guarantee performance at a specified capacity, power consumption, efficiency, or other operating parameter. Correct defects that prevent products from meeting the specified performance parameters. The requirements of the special warranty that guarantee performance will be satisfied when the specified performance parameters have been met for a period of 1 calendar year of operation, unless Owner elects to accept Defective Work under the provisions of the General Conditions.
- E. The Contract Documents may require special warranties for periods extending beyond the one-year correction period specified in the General Conditions. The full warranty provisions and requirements for correction of Defective Work stated in the General Conditions apply throughout the extended warranty period.
- F. Provide a warranty bond to provide the same protection as the Contractor's performance bond for extended special warranties. The warranty bond will become effective on the day the performance bond expires which is 1 year after the date of final payment per the General Conditions. The warranty bond will remain in effect until the extended warranty period has expired.
- G. In the event that products are repaired, modified, or replaced under the warranty bond, then the warranty period will continue on the date of completion of these repairs for a

period of 6 months or until the end of the original warranty period, whichever is later. In no event will the warranty period extend more than 6 months beyond the end of the original warranty period.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide products according to normally accepted engineering and shop practices, except where a higher standard of quality is required by the Contract Documents.
- B. Manufacture like parts of duplicate units to standard sizes and gages that are interchangeable.
- C. Two or more items of the same kind are to be identical and made by the same Supplier.
- D. Provide products suitable for the intended service.
- E. Adhere to the equipment capacities, sizes, and dimensions indicated in the Contract Documents.
- F. Do not use products for any purpose other than that for which they were designed.
- G. Provide new products. Do not provide equipment that has been in service at any time prior to delivery except for testing in accordance with the Contract Documents.
- H. Provide materials suitable for service conditions.
- I. Provide iron castings that are tough, close grained gray iron free from blowholes, flaws, or excessive shrinkage and that conform to ASTM A48.
- J. Design structural members for shock or vibratory loads.
- K. Provide steel that is at least 1/4 inch thick for all elements that will be submerged or subject to splashing all or part of the time during normal operation of the equipment. Chamfer or grind all edges to eliminate sharp exposed edges.

2.02 EQUIPMENT APPURTENANCES

- A. Provide a safety guard covering all sides on belt or chain drives, fan blades, couplings, and other moving or rotating parts:
 - 1. Fabricate safety guards from 16 US gauge or heavier galvanized or aluminum clad sheet steel or 1/2-inch mesh galvanized expanded metal;
 - 2. Design guards for easy installation and removal;
 - 3. Provide galvanized supports and accessories for each guard;
 - 4. Provide stainless steel bolts and hardware; and
 - 5. Provide safety guards designed to prevent the entrance of rain and dripping water in outdoor locations.

2.03 ANCHOR BOLTS

- A. Provide suitable anchor bolts for each product.

- B. Provide anchor bolts with templates or setting drawings in time to permit casting the anchor bolts in the concrete when concrete is placed.
- C. Provide two nuts for each bolt.
- D. Provide anchor bolts for products mounted on baseplates that are long enough to permit 1-1/2 inches of grout beneath the baseplate and to provide adequate anchorage into structural concrete. Bolts must be long enough to provide full nut engagement and leave three threads exposed. Housekeeping pads are not structural concrete.
- E. Provide stainless steel anchor bolts, nuts, and washers.

2.04 SPECIAL TOOLS AND ACCESSORIES

- A. Furnish tools, instruments, lifting and handling devices, and accessories necessary for proper maintenance and adjustment that are available only from the manufacturer or are not commonly available.

2.05 EQUIPMENT IDENTIFICATION PLAQUES

- A. Provide a plaque for each piece of equipment in accordance with Section 40 05 53 "Identification for Process Piping and Equipment."

2.06 LUBRICATION SYSTEMS FOR EQUIPMENT

- A. Provide equipment lubricated by systems which:
 - 1. Require attention no more frequently than weekly during continuous operation.
 - 2. Do not require attention during startup or shut down.
 - 3. Do not waste lubricants.
- B. Provide lubricants to fill lubricant reservoirs and to replace lubricant consumed during testing, startup, and operation prior to acceptance of equipment by the Owner.

2.07 INSULATION OF PIPING

- A. Insulate all piping on or related to equipment as required to prevent freezing under any condition. Insulate piping per the manufacturer's written instruction or per Section 23 07 19 "HVAC Piping Insulation" whichever is more stringent.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install equipment including equipment pre-selected or furnished by the Owner. Assume responsibility for proper installation, startup, and making the necessary adjustments so that the equipment is placed in proper operating condition per Section 01 75 00 "Starting and Adjusting."

3.02 LUBRICATION

- A. Lubricate all products provided or installed for this Project, including products furnished by the Owner, per the manufacturer's written recommendations until the product is accepted by the Owner.

END OF SECTION

01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Comply with requirements of the General Conditions and specified administrative procedures in closing out the Contract.

1.02 DOCUMENTATION

- A. Submit affidavits and releases on forms provided by the Construction Manager through the PMIS.

1.03 SUBSTANTIAL COMPLETION

- A. The following requirements must be met for the Project or a designated portion of the Work to be Substantially Complete per the General Conditions:
 - 1. Work must be fully functional and able to operate in accordance with the Contract Documents without special or extraordinary efforts on the part of the Owner.
 - 2. The following items of Work must be fully functional and able to operate in accordance with the Contract Documents:
 - a. All pipeline, joints, bends, and fittings must be correctly installed, covered, tested, disinfected and approved for use in the potable water distribution system.
 - b. All valves, hydrants, and combination air-vacuum relief valves must be correctly installed, covered, tested, disinfected and approved for use in the potable water distribution system.
 - 3. The following items may remain incomplete in accordance with the Contract Documents:
 - a. Above ground site restoration, including sod, landscaping, commercial signage, roadway, parking lot and driveway pavement, sidewalk, and curb installation does not need to be completed prior to Substantial Completion.
- B. Conduct inspections with superintendent, Subcontractors, and Suppliers for the Work or a designated portion of the Work prior to calling for a Substantial Completion inspection by the OPT. Create a list of deficiencies in the Work that must be completed for the Project to qualify for Substantial Completion. Review the list with the Construction Manager or the designated member of the OPT. The Construction Manager or the designated member of the OPT may assist the Contractor with this effort; however, it is the Contractor's responsibility to create and manage this list of deficiencies until corrections are made.
- C. Correct the identified deficiencies prior to calling for a Substantial Completion inspection.
- D. Notify the Construction Manager that the Work or a designated portion of the Work is Substantially Complete per the General Conditions. Include a list of the items remaining to be completed or corrected before the Project will be considered for Final Completion.
- E. OPT will visit the Site to observe the Work within a reasonable time after notification is received to determine the status of the Project.

- F. Construction Manager will notify the Contractor that the Work is either Substantially Complete or that additional Work must be performed before the Project will be considered Substantially Complete.
 - 1. Construction Manager will notify the Contractor of items that must be completed before the Project will be considered Substantially Complete.
 - 2. Correct the noted deficiencies in the Work.
 - 3. Notify the Construction Manager when the items of Work in the Construction Manager's notice have been completed.
 - 4. OPT will revisit the Site and repeat the process.
 - 5. Construction Manager will issue a Certificate of Substantial Completion to the Contractor when the OPT considers the Project to be Substantially Complete. The certificate will include a tentative list of items to be corrected before Final Payment will be recommended.
 - 6. Review the list and notify the Construction Manager of any objections to items on the list within 10 days after receiving the Certificate of Substantial Completion.

1.04 TRANSFER OF UTILITIES

- A. Transfer utilities to the Owner when the Certificate of Substantial Completion has been issued.
- B. Submit final meter readings for utilities and similar data as of the date the Owner occupied the Work.

1.05 CLOSEOUT REQUIREMENTS

- A. Provide the following before Final Completion:
 - 1. Record Documents per Section 01 31 13 "Project Administration";
 - 2. Keys and keying schedule;
 - 3. Warranties, bonds, and service agreements;
 - 4. Equipment Installation Reports;
 - 5. Shop Drawings, Product Data, operation and maintenance manuals, and other documentation required by the Contract Documents;
 - 6. Specified spare parts and special tools;
 - 7. Certificates of occupancy, operating certificates, or other similar releases required to allow the Owner unrestricted use of the Work and access to services and utilities;
 - 8. Evidence of continuing insurance and bond coverage as required by the Contract Documents; and
 - 9. Final videos and photographs per Section 01 33 06 "Graphic Documentation."

1.06 WARRANTIES, BONDS, AND SERVICES AGREEMENTS

- A. Provide warranties, bonds, and service agreements required by Section 01 33 00 “Document Management” or by the individual Sections of the Specifications.
- B. The date for the start of warranties, bonds, and service agreements is established per the General Conditions.
- C. Compile warranties, bonds, and service agreements and review these documents for compliance with the Contract Documents.
 - 1. Each document is to be signed by the respective Supplier or Subcontractor.
 - 2. Each document is to include:
 - a. The product or Work item description;
 - b. The firm name, with the name of the principal, address, and telephone number;
 - c. Scope of warranty, bond, or services agreement;
 - d. Date, duration, and expiration date for each warranty bond and service agreement;
 - e. Procedures to be followed in the event of a failure; and
 - f. Specific instances that might invalidate the warranty or bond.
- D. Submit digital copies of the documents to the Construction Manager for review.
- E. Submit warranties, bonds, and services agreements within 10 days after equipment or components placed in service.

1.07 FINAL COMPLETION

- A. Conduct inspections with Superintendent, Subcontractors, and Suppliers prior to calling for a Final Completion inspection by the OPT. Create a list of deficiencies in the Work that must be completed for the Project to qualify for the Final Completion inspection. Review the list with the Construction Manager or the designated member of the OPT. The Construction Manager or the designated member of the OPT may assist the Contractor with this effort; however, it is the Contractor’s responsibility to create and manage this list of deficiencies until corrections are made.
- B. Identify, list, and correct deficiencies prior to calling for a Final Completion inspection. The Project at the call for Final Completion represents the Contractor’s interpretation of a project completed in conformance with the Contract Documents and reflects the Contractor’s representation of a quality project meeting the Owner’s expectations.
- C. Notify the Construction Manager when:
 - 1. Work has been completed and complies with the Contract Documents;
 - 2. Equipment and systems have been tested per the Contract Documents and are fully operational;
 - 3. Final operation and maintenance manuals have been provided to the Owner and all operator training has been completed;

4. Specified spare parts and special tools have been provided;
 5. Work is complete and ready for final inspection;
 6. Final documentation for all outstanding Modifications and Claims (other than those listed on the Certificate of Final Completion) have been processed and are ready for incorporation into the final Application for Payment; and
 7. Closeout requirements in Paragraph 1.05 have been completed.
- D. OPT will visit the Site to determine if the Project is complete and ready for final payment within a reasonable time after the notice is received.
 - E. Construction Manager will notify the Contractor that the Project is complete or will notify the Contractor that Work is Defective.
 - F. Take immediate steps to correct Defective Work. Notify the Construction Manager when Defective Work has corrected. OPT will visit the Site to determine if the Project is complete and the Work is acceptable. Construction Manager will issue a Certificate of Final Completion to the Contractor when the Project is complete or will notify the Contractor that Work is Defective.
 - G. Submit the request for final payment with closeout documentation described in Paragraph 1.05 if notified that the Project is complete and the Work is acceptable.

1.08 REINSPECTION FEES

- A. Owner may impose a set-off against the Application for Payment in accordance with the General Conditions to compensate the OPT for additional visits to the Project if additional Work is required.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

Division 03
Concrete

03 30 00.01 CAST-IN-PLACE CONCRETE (LIMITED APPLICATIONS)

1.00 GENERAL

1.01 SUMMARY

- A. This Section specifies normal weight, cast-in-place concrete, including reinforcement, concrete materials, mixture design, placement procedures, and finishes.

1.02 SUBMITTALS

- A. Product Data and Material Certifications: For each product or material indicated in Part 2.00 "Products," excluding formwork.
- B. Design Mixture: For each concrete mixture submit:
 - 1. Mix design proportions and characteristics.
 - 2. Certifications indicating conformance of aggregate and cementitious materials.
 - 3. Admixture data sheets.
 - 4. Field test data or trial batch mixture data to validate specified compressive strength in accordance with ACI 301, latest edition.
- C. Reinforcing bar layout drawing with bar lists clearly marked and referenced to the Drawings.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.
- B. Source Limitations: Obtain each type of cement of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.
- C. Comply with ACI 301, "Specification for Structural Concrete," including the following sections, unless modified by requirements in the Contract Documents:
 - 1. "General Requirements."
 - 2. "Formwork and Formwork Accessories."
 - 3. "Reinforcement and Reinforcement Supports."
 - 4. "Concrete Mixtures."
 - 5. "Handling, Placing, and Constructing."
- D. Comply with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

2.00 PRODUCTS

2.01 FORMWORK

- A. Furnish formwork and formwork accessories according to ACI 301.
 - 1. Form ties shall leave no material within 1-1/2 inches of concrete surface.
 - 2. For fluid bearing and below grade walls, provide single tie rods with midpoint washer to prevent water seepage. Systems that result in a through wall hole are not permitted.

2.02 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A615/A615M, Grade 60, deformed.
- B. Plain-Steel Welded Wire Reinforcement: ASTM A1064, fabricated from as-drawn steel wire into flat sheets.
- C. Supports:
 - 1. Unexposed Surface: CRSI Class 3 – No Protection.
 - 2. Exposed Surface: CRSI Class 1 – Maximum Protection – uniform high density polyethylene (plastic) or fiberglass reinforced plastic (FRP). Plastic protected wire bar supports are not allowed.

2.03 CONCRETE MATERIALS

- A. Cementitious Material:
 - 1. Cement:
 - a. Type I or I/II Portland cement, conforming to ASTM C150.
 - b. Type IL blended hydraulic cement, conforming to ASTM C595.
 - c. Type GU hydraulic cement, conforming to ASTM C1157.
- B. Coarse Aggregate:
 - 1. In conformance with ASTM C33, uniformly graded, with a maximum size as indicated in "Concrete Mixtures."
 - 2. Class: Moderate weathering region, but not less than 3M.
- C. Fine Aggregate: Washed and screened natural sands or sands manufactured by crushing stones; conforming to ASTM C33.
- D. Water: Potable and complying with ASTM C1602 and ASTM C1602 Table 2.

2.04 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C260.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
2. Retarding Admixture: ASTM C494/C494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C1017/C1017M, Type II.

2.05 RELATED MATERIALS

- A. Joint-Filler Strips: ASTM D1751, asphalt-saturated cellulosic fiber, or ASTM D1752, cork or self-expanding cork.
- B. Repair Materials: Pre-packaged, low-shrink, non-slump, non-metallic, quick setting patching mortar, as approved by the manufacturer for each application.
 1. Sikatop 123 by Sika Corporation.
 2. Five Start Structural Concrete by Five Star Products, Inc.
 3. Approved equal.
- C. Non-Shrink Grout: Pre-packaged, non-metallic, precision, non-shrink grout conforming to ASTM C1107/C1107M.
- D. Normal Shrinkage Grout: One part cement to three parts of ASTM C33 fine aggregate; proportioning on a volumetric basis. Install for grouted areas not required to be non-shrink grout.
- E. Waterstops: Place in joints where indicated and any intersecting construction joints to provide a continuous barrier to prevent passage of fluids through joints.
 1. Flexible PVC Waterstops: 6 inches, ribbed, with a minimum thickness of 3/8 inch, USACE CRD-C-572 compliant.
 2. Self-Expanding Strip Waterstops, Low Expansion (Hydrophilic):
 - a. KBA-1510FP; Adeka Ultra Seal; Mitsubishi International Corporation.
 - 1). P-201 swelling sealant adhesive.
- F. Bonding Agent: ASTM C1059, Type II, non-redispersible, acrylic emulsion.
- G. Zinc Richer Primer: Coat aluminum surfaces embedded or in contact with concrete. Primer shall be Tneme-Zinc or approved equal.
- H. Vapor Barriers: ASTM E1745, Class A. Include manufacturer's recommended pressure-sensitive tape.
 1. Stego Wrap Vapor Barrier (15-mil), Stego Tape, and Stego Crete Claw; Stego Industries, LLC.
 2. Approved equal.

2.06 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- C. Waterproof Sheet: In accordance with ASTM C171.
- D. Water: Potable and complying with ASTM C1602 and ASTM C1602 Table 2.
- E. Membrane-Curing Compound: ASTM C309, Type 1-D, Class B.

2.07 CONCRETE MIXTURES

- A. Comply with ACI 301 requirements for concrete mixtures.
- B. Comply with ODOT requirement for concrete mixtures as indicated in the drawings.
- C. Normal-Weight Concrete: Prepare design mixes, proportioned according to ACI 301, as follows:

Use	Min. 28-Day Compressive Strength (psi)	Max. Size of Coarse Aggregate	Max. Water/Cement Ratio	Max Slump (in.)
General	3000	1-1/2"	0.45	5* (+/-1")
Pipe blocking, lean concrete	1500	1-1/2"	0.70	---
*Slump may be increased to 8 inches with the addition of a HRWR.				

- D. Air Content:
 - 1. Air entrain exposed concrete within range permitted by ACI 301 for Exposure Class F1.
 - 2. Do not allow entrapped air to exceed 3 percent in floor slabs to receive troweled finish.

2.08 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C94/C94M, and furnish batch ticket information.

3.00 EXECUTION

3.01 FORMWORK

- A. Design, construct, erect, brace, and maintain formwork according to ACI 301.

3.02 STEEL REINFORCEMENT

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
 - 1. Fabricate reinforcement steel to provide lapped connections, bends, and transitions in reinforcement as required for continuity of the typical reinforcement specified on the Drawings.

2. Unless otherwise detailed, intersecting wall and/or beam reinforcement shall extend to the far face and terminate in a standard hook. Reinforcement at the outside face of corners shall be continuous or provide tension lap splices at each side of the corner.

B. Do not weld reinforcement.

3.03 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete. Purposefully roughen joints to a 1/4-inch amplitude and clean.
- B. Construction Joints: Locate joints as indicated or as approved by Owner's Representative.
- C. Isolation Joints: Install joint-filler strips at junctions with slabs-on-grade and vertical surfaces, and as indicated.
 1. Extend joint fillers full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.

3.04 WATERSTOPS

- A. Install in construction joints as indicated to form a continuous obstruction to prevent fluids passing through the joint.
- B. Secure waterstops to concrete or reinforcing as recommended by the manufacturer.
- C. Install and protect waterstops as recommended by the manufacturer and as indicated here.
- D. PVC Waterstops:
 1. All fittings and changes in direction shall be factory fabricated.
 2. Only straight, butt splices shall be made in the field. Field splices shall be in accordance with manufacturer's instructions.
 3. Secure waterstop in place using hog rings or grommets at the outermost rib. Except as recommended by the manufacturer, do not pierce, notch, or cut waterstop.
- E. Self-Expanding Strip Waterstops:
 1. Bond waterstop to substrate using continuous bead of swelling sealant or adhesive as recommended by the manufacturer.
 2. Install in longest lengths practical. Splice as required; lap in accordance with manufacturer's recommendations.
 3. Protect from moisture, oil, dirt, and sunlight.

3.05 CONCRETE PLACEMENT

- A. Comply with ACI 301 for measuring, batching, mixing, transporting, and placing concrete.
- B. Additional water may only be added to concrete prior to placement and only at Project Site. Slump shall be evaluated prior to and after the addition of all water. Do not take strength cylinders until after addition of all water.

1. Quantity of water shall not exceed the amount withheld at the batch plant. Quantity withheld shall be indicated on the batch ticket. Addition of water shall not result in a slump or water-cement ratio greater than that specified.
- C. Do not allow concrete to free fall more than 5 feet. With HRWR concrete may free fall a maximum of 10 feet.
- D. Consolidate concrete with mechanical vibrating equipment.

3.06 FINISHING UNFORMED SURFACES

- A. General: Comply with ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Screed surfaces with a straightedge and strike off. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane before excess moisture or bleedwater appears on surface. Do not further disturb surfaces before starting finishing operations.
- C. Float Finish: Apply float finish to surfaces to receive trowel finish or nonslip broom finish. Except as indicated below, apply a final "light float" finish to the surface as the concrete hardens. Surface shall have a uniform granular texture and shall meet the straightness requirements.
- D. Trowel Finish: Apply a normal steel trowel finish to interior surfaces exposed to view and grouted surfaces in junction boxes.
- E. Nonslip Broom Finish: Apply a nonslip broom finish to exterior concrete sidewalk and ramp surfaces. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.

3.07 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 301. Additionally, comply with ACI 306.1 for cold-weather protection and with ACI 305.1 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb./sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure formed and unformed concrete for at least 7 days by one or a combination of the following methods:
 1. Moisture Curing: Keep surfaces continuously moist for not less than 7 days with the following materials:
 - a. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than 7 days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.08 MISCELLANEOUS CONCRETE ITEMS

- A. Non-Shrink Grout: Install and cure as recommended by manufacturer, and as required here:
 1. Clean and roughen exposed concrete surface; remove laitance. Saturate the foundation 24 hours before installation. Surface shall be clear of standing water. Baseplates shall be free of oil, grease, and other objectionable substances.
 2. Steel trowel exposed edges.
 3. Moist cure as specified by manufacturer, but not less than 3 days.
- B. Normal Shrinkage Grout:
 1. Clean and roughen exposed concrete surface, remove laitance. Saturate the foundation 24 hours before installation. Surface shall be clear of standing water. Apply scrub coat of grout immediately prior to grout placement. While scrub coat is still moist install grout.
 2. Wet cure as specified for concrete.
- C. Vapor Barrier:
 1. Install in accordance with manufacturer's recommendations including seams, penetrations, and repairs.
 2. At perimeter of concrete, secure vapor barrier to concrete with Stego Crete Claw.

3.09 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement according to requirements specified in this Article.
- B. Tests: Perform according to ACI 301.
 1. Testing Frequency: One composite sample shall be obtained for each day's pour of each concrete mix exceeding 5 cu. yd. but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.

3.10 REPAIRS

- A. Remove and replace concrete that does not comply with requirements in this Section.

- B. Repair materials and surface preparation shall be completed in accordance with manufacturer recommendations. Coordinate with Owner's Representative prior to beginning any demolition of defective area.

END OF SECTION

Division 22

Plumbing

22 10 00.01 MISCELLANEOUS PIPING AND APPURTENANCES

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to install miscellaneous piping, fittings, and appurtenances.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:
 - 1. Shop Drawings.

2.00 PRODUCTS

2.01 PIPE COUPLINGS

- A. Dresser style pipe couplings where shown on the Plans shall be Dresser Industries or approved equal, for same pressure rating as adjoining pipe. Couplings shall comprise a steel center band, steel gland rings, gaskets, and bolts.
- B. Victaulic style couplings shall be in accordance with AWWA C606. Pipe shall have shouldered or collared ends for positive thrust anchorage.
- C. Split-sleeve mechanical couplings shall consist of housing, gasket assembly, bolts and nuts, and end rings as required for restraint. Couplings shall be Depend-O-Lok as manufactured by Brico Industries, Inc., or an approved equal. Coupling housing shall be manufactured from ASTM A36 Carbon Steel. Couplings installed underground shall receive a Bitumastic coating.
- D. Where Victaulic couplings or restrained Dresser type couplings are shown on the Drawings for water service pipes, split-sleeve "F by F" type couplings will be allowed, provided the split-sleeve coupling is suitable for the pressures and thrust requirements, and fits in the space available for coupling. Where unrestrained Dresser couplings are shown, split-sleeve "F by E" type couplings will be allowed.

3.00 EXECUTION

3.01 INSTALLATION

- A. Piping shall be carefully handled and installed to prevent damage to the pipes. Potable water lines shall be disinfected in accordance with Section 33 10 13 "Disinfecting of Water Utility Distribution." The Contractor shall furnish aluminum sleeves for lines passing through walls, floors, beams, roof slabs, etc.

3.02 FIELD QUALITY CONTROL

- A. Lines shall be tested for leaks. Leaks and defects shall be repaired or replaced, and re-tested until no leaks or defects are discovered.

END OF SECTION

Division 31
Earthwork

31 05 13 SOILS FOR EARTHWORK

1.00 GENERAL

1.01 WORK INCLUDED

- A. This Section of the specifications describes the various classes of Earth Fill. All of the classes of Earth Fill contained in this specification may not be used on this project. The classes of Earth Fill used on this project are shown on the drawings or specified in other sections of the specifications. This Section does not include specifications for placement and compaction of Earth Fill. Specifications for placement and compaction of Earth Fill are included in other sections of the specifications and/or shown on the drawings.

1.02 STANDARDS

- A. Soil materials shall be classified into the appropriate class of Earth Fill shown below according to ASTM D2487 "Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)" or other appropriate methods as designated by the Engineer.

2.00 PRODUCTS

2.01 MATERIALS; CLASSIFICATIONS

- A. Class 1 Earth Fill: Limited to clays and sandy clays classified as CH material with a liquid limit greater than or equal to 50, a plasticity index greater than or equal to 25, and a minimum of 60 percent passing the No. 200 sieve, which are free of organic materials.
- B. Class 2 Earth Fill: Limited to clays and sandy clays classified as CH and CL materials with a coefficient of permeability less than or equal to 1.0×10^{-7} cm/sec, a liquid limit greater than or equal to 30, a plasticity index greater than or equal to 15, and more than 50 percent passing the No. 200 sieve, which are free of organic materials.
- C. Class 3 Earth Fill: Consist of any materials classified as CH, CL, SM, SP, SP-SM, SC, and GC, which have a minimum plasticity index of 4, which are free of organic materials.
- D. Class 4 Earth Fill: Consist of materials which are classified as SP, SM, SC, CL, or dual classifications thereof, which have a liquid limit less than or equal to 35 and a plasticity index of a minimum of 4 and a maximum of 15, which are free of organic materials.
- E. Class 5 Earth Fill: Consist of materials classified as SP or SP-SM which have a plasticity index less than or equal to 4 and a maximum of 12 percent passing the No. 200 sieve, which are free of organic materials.
- F. Class 12 Earth Fill: Consist of soils suitable for topsoil which are relatively free of stones or other objectionable debris, which have sufficient humus content to readily support vegetative growth. The suitability of soils for topsoil shall be subject to the approval of the Engineer.

3.00 EXECUTION (NOT APPLICABLE)

END OF SECTION

31 05 16 **AGGREGATES FOR EARTHWORK**

1.00 **GENERAL**

1.01 WORK INCLUDED

- A. This Section of the specifications describes the various classes of Aggregate Fill. All of the classes of Aggregate Fill contained in this specification may not be used on this project. The classes of Aggregate Fill used on this project are shown on the drawings or specified in other sections of the specifications. This Section does not include installation. Installation of Aggregate Fill is included in other sections of the specifications and/or on the drawings.

1.02 QUALITY ASSURANCE

- A. Classification Testing:
1. Contractor Testing:
 - a. Arrange and pay for the services of an independent testing laboratory to sample and test proposed Aggregate Fill materials.
 - b. Submit the test results to the Engineer, and obtain approval prior to providing Aggregate Fill.
 2. Owner Testing: The Owner shall arrange and pay for additional testing on the Aggregate Fill after delivery to the project site as determined necessary by the Engineer.
- B. Contamination Certification:
1. Obtain a written, notarized certification from the Supplier of each proposed Aggregate Fill source stating that to the best of the Supplier's knowledge and belief there has never been contamination of the source with hazardous or toxic materials.
 2. Submit these certifications to the Engineer prior to proceeding to furnish Aggregate Fill to the site. The lack of such certification on a potential Aggregate Fill source shall be cause for rejection of that source.

1.03 STANDARDS

- A. Aggregate Fill shall be classified into the appropriate class listed below according to ASTM testing procedures as specified for the various classes.
1. American Society for Testing and Materials (ASTM) Standards:

ASTM C33	Specification for Concrete Aggregates
ASTM C88	Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium sulfate
ASTM C125	Terminology Relating to Concrete and Concrete Aggregates
ASTM C131	Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C535	Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM D448	Classification for Sizes of Aggregate for Road and Bridge Construction

2.00 PRODUCTS

2.01 MATERIALS; CLASSIFICATIONS

- A. Class 1 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 57:

Sieve Size Square Opening	Percent Passing
1-1/2"	100
1"	95-100
1/2"	25-60
No. 4	0-10
No. 8	0-5

- B. Class 2 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 67:

Sieve Size Square Opening	Percent Passing
1"	100
3/4"	90-100
3/8"	20-55
No. 4	0-10
No. 8	0-5

- C. Class 3 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 7:

Sieve Size Square Opening	Percent Passing
3/4"	100

1/2"	90-100
3/8"	40-70
No. 4	0-15
No. 8	0-5

- D. Class 4 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 467:

Sieve Size Square Opening	Percent Passing
2"	100
1-1/2"	95-100
3/4"	35-70
3/8"	10-30
No. 4	0-5

- E. Class 5 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 357:

Sieve Size Square Opening	Percent Passing
2-1/2"	100
2"	95-100
1"	35-70
1/2"	10-30
No. 4	0-5

- F. Class 6 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 1:

Sieve Size Square Opening	Percent Passing
4"	100
3-1/2"	90-100
2-1/2"	25-60
1-1/2"	0-15
3/4"	0-5

- G. Class 7 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and shall have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 6:

Sieve Size Square Opening	Percent Passing
1"	100
3/4"	90-100
1/2"	20-55
3/8"	0-15
No. 4	0-5

- H. Class 8 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and shall have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation in accordance with ASTM D448, size number 56:

Sieve Size Square Opening	Percent Passing
1-1/2"	100
1"	90-100
3/4"	40-85

1/2"	10-40
3/8"	0-15
No. 4	0-5

I. Class 9 Aggregate Fill:

1. Consist of washed and screened gravel and natural sands or sands manufactured by crushing stones complying with the requirements of ASTM C33, except that the gradation shall be as follows:

Sieve Size Square Opening	Percent Passing
1/2"	100
3/8"	95-100
No. 4	80-95
No. 8	65-85
No. 16	50-75
No. 30	25-60
No. 50	10-30
No. 100	0-10

2. Class 9 Aggregate Fill shall have not more than 45 percent passing any sieve and retained on the next consecutive sieve of those shown above, and its fineness modulus, as defined in ASTM C125, shall be not less than 2.3 nor more than 3.1.

J. Class 10 Aggregate Fill:

1. Consist of washed and screened natural sands or sands manufactured by crushing stones complying with the requirements and tests of ASTM C33. The gradation as included in ASTM C33 is as follows:

Sieve Size Square Opening	Percent Passing
3/8"	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	0-10

2. Class 10 Aggregate Fill shall have not more than 45 percent passing any sieve and retained on the next consecutive sieve of those shown above, and its fineness modulus, as defined in ASTM C125, shall be not less than 2.3 nor more than 3.1.

- K. Class 11 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable material and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation:

Sieve Size Square Opening	Percent Passing
1-3/4"	100
7/8"	65-90
3/8"	50-70
No. 4	35-55
No. 40	15-30
No. 100	0-12 (Wet Sieve Method)

- L. Class 12 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable material and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation:

Sieve Size Square Opening	Percent Passing
1-1/2"	100
1"	85-100
3/4"	60-95
3/8"	50-80
No. 4	40-65
No. 16	20-40
No. 100	0-12 (Wet Sieve Method)

- M. Class 13 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable material and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and shall meet the following gradation:

Sieve Size Square Opening	Percent Passing
1-3/4"	100
7/8"	65-90

3/8"	50-70
No. 4	35-55
No. 40	15-30
No. 100	0-3 (Wet Sieve Method)

- N. Class 14 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable material and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131 or C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, Sodium Sulfate Solution, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the Engineer and meet the following gradation:

Sieve Size Square Opening	Percent Passing
1-1/2"	100
1"	85-100
3/4"	60-95
3/8"	50-80
No. 4	40-65
No. 16	20-40
No. 100	0-3 (Wet Sieve Method)

- O. Class 15 Aggregate Fill: Consist of durable particles of silica sand, washed clean, chemically inert, and packaged by the Supplier. The material shall meet applicable regulatory requirements for monitor well filter pack. The source of the material shall be approved by the Engineer and shall meet the following gradation requirements:

Sieve Size Square Opening	Percent Passing
No. 20	98-100
No. 40	0-2

3.00 EXECUTION (NOT APPLICABLE)

END OF SECTION

31 11 00 CLEARING AND GRUBBING [CIVIL]

1.00 GENERAL

1.01 WORK INCLUDED

- A. Provide labor, materials, equipment and incidentals necessary to perform operations in connection with clearing, grubbing, and disposal of cleared and grubbed materials.

1.02 QUALITY ASSURANCE; DEFINITIONS

- A. Clearing: Clearing is defined as the removal of trees, shrubs, bushes, and other organic matter at or above original ground level.
- B. Grubbing: Grubbing is defined as the removal of stumps, roots, boards, logs, and other organic matter found at or below ground level.

2.00 PRODUCTS (NOT APPLICABLE)

3.00 EXECUTION

3.01 PREPARATION

- A. Mark areas to be cleared and grubbed prior to commencing clearing operations. The Owner's Representative shall approve clearing and grubbing limits prior to commencement of clearing operations.
- B. Trees and shrubs outside of the clearing limits, which are within 10 feet of the clearing limits, shall be clearly marked to avoid damage during clearing and grubbing operations.
- C. Remove trees and brush outside the clearing limits, but within the immediate vicinity of the work, upon receipt of approval by the Owner's Representative, when the trees or brush interfere with the progress of construction operations.
- D. Clearly mark trees and shrubs within the clearing limits, which are to remain, and protect the trees and shrubs from damage during the clearing and grubbing operations.
- E. The clearing limits shall not extend beyond the project limits.
- F. Establish the clearing limits as follows:
 - 1. Trench top width
- G. Establish the grubbing limits as follows:
 - 1. Trench top width

3.02 INSTALLATION

- A. Clearing: Clearing shall consist of the felling, cutting up, and the satisfactory disposal of trees and other vegetation, together with the down timber, snags, brush, rubbish, fences, and debris occurring within the area to be cleared.
- B. Grubbing:

1. Grubbing shall consist of the removal and off-site disposal of grass, stumps, roots and other debris prior to commencement of earthwork operations.
 - a. Use only hand methods for grubbing inside drip line of trees indicated to be left standing.
2. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
3. Topsoil:
 - a. Topsoil is defined as friable clay loam surface soil found at a depth of not less than 4". Satisfactory topsoil is free of subsoil, clay lumps, stones, and other objects over 3/4" in diameter, and without weeds, roots, gravel, and other objectionable material. All topsoil is subject to the approval of the Engineer.
 - b. Strip topsoil to whatever depths encountered in a manner to prevent intermingling with underlying subsoil.
 - c. Remove heavy growths of grass from areas before stripping.
 - d. Where trees are indicated to be left standing, stop topsoil stripping a sufficient distance to prevent damage to main root system.
 - e. Stockpile satisfactory topsoil in storage piles in areas negotiated with the Owner prior to placement. Placement of topsoil will be required in preparation of a seed bed. Construct storage piles to freely drain surface water. Cover storage piles if required to prevent wind-blown dust. Install silt fence around stockpiles to prevent siltation.

3.03 FIELD QUALITY CONTROL

- A. Burning of Site Clearing waste materials will not be allowed.
- B. Completely remove timber, logs, roots, brush, rotten wood, and other refuse from the Owner's property. Disposal of materials in streams shall not be permitted and no materials shall be piled in stream channels or in areas where it might be washed away by floods. Timber within the area to be cleared shall become the property of the Contractor, and the Contractor may cut, trim, hew, saw, or otherwise dress felled timber within the limits of the Owner's property, provided timber and waste material is disposed of in a satisfactory manner. Materials shall be removed from the site daily, unless permission is granted by the Engineer to store the materials for longer periods.

END OF SECTION

31 23 23.34 FLOWABLE FILL

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment, and incidentals necessary to mix and place flowable fill, consisting of Portland cement, fine aggregate, fly ash, and water in the proper proportions as specified hereinafter. Flowable fill (Controlled Low-Strength Material, CLSM) shall be used to bed and backfill around piping, utilities, and structures where indicated.

1.02 QUALITY ASSURANCE

- A. Design Criteria – Flowable Fill Proportions and Consistency: Flowable fill shall be proportioned to give the necessary workability, strength, and consistency, and shall conform to the following governing requirements:
 - 1. Permeability: Maximum permeability limit of 1×10^{-6} cm/sec. This limit shall apply at all locations where flowable fill is used as a utility trench plug (dam) within trench backfill materials.
 - 2. Subsidence: Evaporation of bleed water shall not result in shrinkage of more than 10.4 mm per m (1/8 inch per ft.) of flowable fill depth. Measurement of a Final Bleeding shall be as measured in Section 10 of ASTM C940.
 - 3. Strength for Excavatable Flowable Fill: Unconfined compressive strength at 28-days when tested in accordance with ASTM D4832: 100 psi (+/- 50 psi).
 - a. Long-term strengths (greater than 90 days) shall not exceed 150 psi.
 - b. Where indicated provide Excavatable Flowable Fill around utilities, unless noted otherwise.
 - c. Excavatable Flowable Fill shall be excavatable with hand tools and conventional machinery such as backhoes.
 - 4. Strength for Non-Excavatable Flowable Fill: Unconfined compressive strength at 28-days when tested in accordance with ASTM D4832: 150 psi minimum.
 - a. Where indicated provide Non-Excavatable Flowable Fill below structures and/or around structures, unless noted otherwise.
 - 5. Fluidity: Flowable fill shall be self-consolidating and non-segregating in accordance with ASTM C1611:
 - a. Slump Flow Test: Minimum 20-inch mean spread.
- B. Factory Testing: The Contractor shall be responsible for the design of the material. A trial mix shall be designed by an independent testing laboratory, retained by the Contractor. The testing laboratory shall submit verification that the materials and proportions of the trial mix design meets the requirement of the Specifications. In lieu of trial mix design, Contractor may submit historical data for a mix design used successfully in previous similar work. The Contractor shall not make changes in materials, either in gradation, source, or brand, or proportions of the mixture after having been approved, except by specific approval of the Engineer.

- C. Owner Testing: It is the responsibility of the Contractor to achieve and maintain the quality of material required by this Section. However, the Owner may secure the services of an independent testing laboratory to verify the quality of the flowable fill. The Owner shall have the right to require additional testing, strengthening, or replacement of flowable fill which has failed to meet the minimum requirements of this Section.

1.03 SUBMITTALS

- A. Submit mix design on each material required. Provide backup data as required below.
B. Submit historical or trial mix data and test results as a basis for mix design approval.

Required data shall include:

1. Permeability test results if plugs are required on Project.
2. Subsidence test results.
3. Strength test results for Excavatable and Non-Excavatable Flowable Fill if used on Project.
4. Fluidity test results.

1.04 STANDARDS AND REFERENCES

- A. Materials shall meet recommendation for mix design and placement, as published by National Ready Mixed Concrete Association.
B. The applicable provisions of the following references and standards shall apply to this Section as if written herein in their entirety.

1. ASTM International (ASTM) Standards:

ASTM C33	Specification for Concrete Aggregates
ASTM C40	Test Method for Organic Impurities in Fine Aggregates for Concrete
ASTM C150	Specification for Portland Cement
ASTM C618	Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as Mineral Admixture in Portland Cement Concrete
ASTM C 940	Standard Test Method for Expansion and Bleeding of Freshly Mixed Grouts for Preplaced-Aggregate Concrete in the Laboratory
ASTM C 1611	Standard Test Method for Slump flow of Self Consolidating Concrete
ASTM D 4832	Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders

2.00 PRODUCTS

2.01 MATERIALS

- A. Cement: ASTM C150, Type I or II.
B. Fly Ash/Pozzolans: ASTM C618, Class C.
C. Fine Aggregate: ASTM C33, fine aggregate.

1. ASTM C40: Aggregate shall not contain strong alkali, or organic material which gives a color darker than the standard color.
- D. Water: Potable and in conformance with ASTM C1602 and ASTM C1602, Table 2.
- E. Performance Additive: As required to meet specification requirements:
 1. DaraFill by GCP Applied Technologies.
 2. Rheocell Rheofill by BASF The Chemical Company.
 3. Sika Lightcrete Powder by Sika Corporation.
 4. Approved equal.
- F. Chemical Admixtures for Concrete per ASTM C 494, as required by performance requirements.

2.02 MIXES

- A. In the determination of the amount of water required for mix, consideration shall be given to the moisture content of the aggregate. The net amount of water in the mix will be the amount added at the mixer; plus the free water in the aggregate; and minus the absorption of the aggregate, based on a 30 minute absorption period. No water allowance shall be made for evaporation after batching.
- B. The methods of measurement of materials shall be such that the proportions of water to cement are closely controlled during the progress of the Work and easily checked at any time by the Owner's representative. To avoid unnecessary or haphazard changes in consistency, the aggregate shall be obtained from sources which will insure a uniform quality and grading during any single day's operation and they shall be delivered to the Work and handled in such a manner that the variation in moisture content will not interfere with the steady production of flowable fill of reasonable degree of uniformity. Sources of supply shall be approved by the Owner's representative.
- C. All material shall be separately and accurately measured. All equipment for measurement of materials shall be subject to approval by the Owner's representative.

3.00 EXECUTION

3.01 INSTALLATION

- A. Contractor shall give the Owner's representative sufficient advance notice before starting to place material in any area, to permit inspection of the area, and preparation for pouring.
- B. Conduct the operation of depositing the material so as to form a well consolidated mass and so as not to develop air pockets in confined spaces.
- C. Unless specified otherwise, flowable fill shall be uniformly placed to the depth shown on the Drawings. The fill shall be brought up uniformly to the top of excavation elevation or as otherwise indicated on the Drawings. Placement of flowable fill shall then cease and the fill protected from traffic for a period of not less than 72 hours.
 1. To prevent pipe flotation place material in lifts or provide alternate means.

2. Around structures, material shall be placed in lifts. Lift depth shall not exceed one-tenth of total structure embedment into subgrade nor 5 feet, whichever is less.
 3. When multiple lifts are required, material shall be allowed to harden before placing next lift. Hardening time varies with each mix. Verify flowable fill has reached a penetration number of 1500, in accordance with ASTM C 403, but not less than 5 hours.
- D. The material shall be placed against undisturbed trench walls, and shall not be placed on or against frozen ground.
- E. At time of placement the ambient temperature shall be 35 F and rising.

3.02 FIELD QUALITY CONTROL

- A. An approved testing laboratory shall perform the quality control testing of backfill operations. The testing laboratory shall sample material in accordance with ASTM D5971. The testing laboratory shall monitor backfill operation continuously or at intervals acceptable to the Owner and Engineer at structures. It shall be the responsibility of the Contractor to provide sufficient advance notification to the testing laboratory before backfill operations begin.
1. Strength: A strength test is the average of two cylinders per ASTM D4832.
 2. Fluidity: A fluidity test is a Slump Flow Test and a VSI Test per ASTM C1611.
 3. For all tests required, at a minimum perform one test per day, but not less than one per 150 cubic yards.

END OF SECTION

31 23 33 TRENCHING AND BACKFILL

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to perform operations in trenching, pipe bedding, backfilling, clearing, grubbing and site preparation; handling, storage, transportation and disposal of excavated material; pumping and dewatering; preparation of subgrades; protection of adjacent property; fills, grading; and other appurtenant work.
- B. Trenching, backfilling, and pipe embedment procedures shall be in full compliance with Section 31 23 36 "Trench Safety."
- C. Material sampling and testing roles, responsibilities and procedures shall be in full compliance with Section 01 40 00 "Quality Management."
- D. Earth removed from excavations and which is not required for backfill shall be removed from the Site by the Contractor at its own expense, unless arrangements are made with the Owner through its representative to allow disposal on Site. If permitted, the Contractor shall dump and spread excess earth in a manner agreed upon by the Contractor and the Owner.
- E. Excavations, other than trench excavation, are not part of this Section.
- F. Bidders must satisfy themselves as to the actual existing subsurface conditions prior to the submittal of a proposal to complete the proposed Work. No extra or separate payments shall be made for rock, dewatering, or any other condition.

1.02 QUALITY ASSURANCE

- A. Excavations shall include material of whatever nature encountered, including but not limited to clays, sands, gravels, conglomeritic boulders, weathered clay shales, rock, debris and abandoned existing structures. Excavation and trenching shall include the removal and subsequent handling of materials excavated or otherwise handled in the performance of the Work.
- B. Trench excavation shall consist of excavation to the lines and grades indicated, required for installation of the pipe, pipe bedding, backfill, and to accommodate trench safety systems.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:
 - 1. Certified test reports for embedment material, backfill material, and coarse gravel. Certified Test Reports shall be from an independent laboratory. Test reports shall include sieve analysis, Atterburg limits, results of an abrasion test, and other tests as required to demonstrate compliance with Paragraph 2.01.
 - 2. Test results indicating soil resistivity for embedment material used on metal pipe.

3. Field density test reports indicating that the Contractor's method of backfill meets the requirements of the Contract Documents. The field density testing for granular embedment shall be done in a manner approved by the Owner/Engineer by an independent testing lab in accordance with ASTM D4253. The cost of the field testing shall be included in the Bid Price for the Work, with no additional compensation to the Contractor.

1.04 REFERENCE SPECIFICATIONS

- A. Section 01 33 00 "Document Management."
- B. Section 01 40 00 "Quality Management."
- C. Section 03 30 00.01 "Cast-In-Place Concrete (Limited Applications)."
- D. Section 31 05 13 "Soils for Earthwork."
- E. Section 31 05 16 "Aggregates for Earthwork."
- F. Section 31 23 23.34 "Flowable Fill"
- G. Section 31 23 36 "Trench Safety."

1.05 STANDARDS

- A. The following publications, referred to hereafter by basic designation only, form a part of this Section to the extent indicated by the references thereto:
 1. ASTM International (ASTM):

ASTM C33	Standard Specification for Concrete Aggregates
ASTM C88	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C125	Standard Terminology Relating to Concrete and Concrete Aggregates
ASTM C131	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C535	Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D448	Standard Classification for Size of Aggregate for Road Bridge Construction
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft ³ (600 kN-m/m ³))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D4253	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-aggregate by Nuclear Methods (Shallow Depth)

ASTM G57	Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method
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- B. Any other testing required by these specifications and not specifically referenced to a standard shall be performed under ASTM or other appropriate standards as designated by the Engineer.
- C. Reference herein or on the Drawings to soil classifications shall be understood to be according to ASTM D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).

1.06 DELIVERY AND STORAGE

- A. Excavated materials to be used for backfill may be deposited in stockpiles at points convenient for rehandling the material during the backfilling process. If not indicated on the Drawings, the location of stockpiles shall be within the limits of construction easements or public right-of-way. The location of stockpiles is subject to the approval of the Owner or the Owner's representative. Do not place stockpiles over buried pipelines or utilities unless adequate provisions are made for protection. Roads and driveways must be kept open unless written authorization is granted by Owner. Keep drainage channels clear of stockpiled materials.
- B. If more than one material is stockpiled on site, maintain separation and clearly identify stockpiles. Cross-contamination of materials will not be permitted and will serve as grounds for rejection.

1.07 JOB CONDITIONS

- A. Classification of Excavation: Excavation shall be "unclassified" and involves the removing of the necessary materials to provide the trench/excavation to the required width and depth. Contractor must satisfy itself as to the actual sub-surface conditions prior to submitting a proposal. No extra or separate payments shall be made for rock, dewatering or any other condition.
- B. Road Crossings: Where the Work requires road closure, coordinate with the Owner to obtain written approval detailing the extents of the road closure as well as the duration the road will be out of service. Provide temporary access and detours for roads and driveways as required by the Owner.
- C. Place no embedment or backfill material during freezing weather or upon frozen subgrades or previously placed frozen embedment or backfill materials.

2.00 PRODUCTS

2.01 MATERIALS

- A. Concrete for Backfill, Blocking, Cradling and Encasement: Unless other strength requirements are designated, concrete used shall be as specified for pipe blocking, lean concrete, in Section 03 30 30.01 "Cast-In-Place Concrete (Limited Applications)."
- B. Earth Fill: Earth fill materials shall be as specified in Section 31 05 13 "Soils for Earthwork."

- C. Granular Embedment and Backfill: Granular embedment material shall be as specified in Section 31 05 16 "Aggregates for Earthwork."
- D. Coarse Gravel: Where coarse gravel is required for water drainage, restoration of trench foundation, or other uses, it shall be crushed stone or gravel and in compliance with ASTM C33 for Coarse Concrete Aggregate. Gradation shall be ASTM C33 No. 57, No. 67, No. 357, or as follows:

Sieve Size Square Opening	Percent Passing
1"	95-100
3/4"	55-85
1/2"	25-50
No. 4	0-5

- E. Flowable Fill: Flowable fill shall be in accordance with Section 31 23 23.34 "Flowable Fill."
- F. Modified Flowable Fill: Modified flowable backfill in areas of possible future excavation shall consist of a mixture of native soils or manufactured materials, cement and/or fly ash, air entraining material and water which produces a material with unconfined compressive strength of between 250 and 450 psi after 28 days. Any materials used shall be primarily granular, with a plasticity index less than 12 and with 100 percent passing a 3/4-inch sieve. The flowable mixture shall be mixed in a pug mill, concrete mixer, or transit mixer and shall have a minimum slump of 5 inches. The flowable mixture must be allowed to set prior to the placement of any overlying materials. Modified flowable backfill in permanent areas such as abandoned pipe closures shall contain the same materials and have an unconfined compressive strength greater than 250 psi after 28 days.
- G. Utility Detection Tape: Utility pipe detection tape shall be installed over all PVC, HDPE, or fiberglass pipelines 8 inches and larger. The tape shall be bright-colored, continuous-printed plasticized aluminum tape, intended for direct-burial service, and meet the following requirements:
 - 1. Width: 6 inches.
 - 2. Thickness: 5 mils minimum.
 - 3. Lettering: 1-inch high permanent black, continuously printed.
 - 4. Color: Per APWA Uniform Color Code:
 - a. Green - Sanitary Sewer Lines.
 - b. Blue - Potable Water.
 - c. Purple - Reclaimed Water, Irrigation.
 - 5. Detection tape must be installed above the pipe zone, 12 inches above pipe.
- H. Tracer Wire: All piping shall be installed with a continuous, insulated TW, THW, THWN or HMWPE insulated copper, 10 gauge or thicker wire for pipeline location purposes by means of an electronic line tracer. The wire shall be installed along the entire length of pipe. The insulation color shall match the color of the pipe being installed. Sections of wire shall be

spliced together using approved splice caps and waterproof seals. Twisting the wires together is not acceptable.

3.00 EXECUTION

3.01 PREPARATION

A. Site:

1. Clear sites of logs, trees, roots, brush, tree trimmings and other objectionable materials and debris which are to be occupied by pipe trenches, and grub stumps. Designate material not salvaged for reuse as surface material as spoiled and dispose of material in accordance with Paragraph 3.01.E, Disposal of Spoil Material.
2. Do not remove trees outside of the required working area unless their removal is authorized in writing by the Engineer and with the approval of the local governing authority. Adequately protect the trees left standing from permanent damage by construction operations. Standing trees may be trimmed where necessary to facilitate construction, but only with written authorization from the Engineer.

B. Dewatering:

1. Provide and maintain adequate dewatering equipment to remove and dispose of surface and ground water entering the excavations, trenches, or other parts of the Work. Keep each excavation dry during subgrade preparation and continually thereafter until the proposed pipe is installed. Maintain the proper procedures necessary to protect against damage to the proposed Work from hydrostatic pressure, flotation, or other water related causes.
2. Dewater excavations which extend down to or below ground water elevation by lowering and keeping the ground water level a minimum of 2 feet below the bottom of the excavation.
3. Divert surface water or otherwise prevent water from entering excavated areas to the fullest extent possible without causing damage to adjacent property.
4. Provide and maintain any piping or conduit necessary to facilitate drainage. Do not alter area drainage patterns to the extent that adjacent property and landowners become threatened with localized flooding and/or water damage. Should such a situation occur, the Contractor shall be responsible for repairing the damage at no additional cost to the Owner.

C. Protection of Existing Structures and Utilities:

1. Prior to the start of construction, communicate with the representatives of the local utility companies, including the oil, gas, telephone and communications companies, and local water and sewer utilities operating in the location of the proposed construction area. Seek the utility companies' assistance in locating existing facilities to avoid conflicts during construction. The location, number, depth, and owner of utilities indicated are for information purposes only, and all utilities and structures may not be shown or may not be at the location shown.
2. Where construction endangers adjacent structures, utilities, embankments and/or roadways, the Contractor shall, at his own expense, carefully support and protect such

structures so that no damage occurs throughout the construction process. In case damage should occur, the Contractor shall be responsible for restoring the damaged structure to a condition acceptable to the Owner of that structure and shall bear all cost of such reparations.

3. Repair or replace damaged street surfaces, driveways, sidewalks, curbs, gutters, fences, drainage structures, or other such facilities to the satisfaction of the Owner. Structures shall be returned to a condition equal to or better than the original condition and of same or better material and quality.
 4. Relocate minor utilities as necessary, at no additional cost to the Owner, in order to resolve conflicts with new Work. Minor utilities shall be defined as conduit less than or equal to 2 inches in diameter and pressure piping less than or equal to 6 inches in diameter. All proposed relocations shall be submitted in writing and approved by Owner or Owner's representative prior to accomplishing the Work.
- D. Blasting: Blasting shall not be allowed in any instance.
- E. Disposal of Spoil Material:
1. Suitable material from excavations which meets the requirements for pipe backfill material as indicated, except stripping excavation, may be reused. Designate the remaining excavated materials as spoiled material and dispose of material off the Site in accordance with all applicable laws, ordinances, and codes. Contractor shall be responsible for the storage, transportation, and deposition of spoiled material and shall be responsible for acquiring the necessary permits, and the payment of fees and duties at no additional cost to the Owner.
 2. No burning of materials shall be permitted on the Site.

3.02 TRENCH EXCAVATION

- A. General: The trenches shall be excavated to the alignment and depth indicated or as necessary for the proper installation of the pipe and appurtenances. Brace and dewater the trench if necessary so that the workmen may work therein safely and efficiently. Any specific requirement listed in Paragraph 3.00, Execution, may be modified as necessary to meet OSHA requirements. However, if trench widths are wider than indicated, the Contractor shall be responsible for determining and furnishing the proper class of embedment and piping for the installation with no additional compensation to the Contractor.
- B. Trench Width: The trench widths shall be as shown on the Drawings.
- C. Pipe Foundation Subgrade:
1. Excavate the trench to an even grade to permit the installation of the pipe so that the full length of the pipe barrel is supported on the proper depth of bedding material. The entire foundation subgrade area in the bottom of the excavations shall be firm, stable material, and the material shall not be disturbed below required grade except as described in this Section. Where the character of the subgrade material is such that proper subgrade cannot be obtained at the elevation indicated, deepen the excavation to a satisfactory subgrade material.

2. Remove the material until a firm, stable, and uniform bearing is reached and the subgrade brought back to the required grade with coarse gravel thoroughly compacted to 95 percent maximum density as measured by ASTM D4253. The expense of replacing any unsatisfactory subgrade shall be borne by the Contractor.
- D. Correcting Faulty Grade: If the trench is excavated to a faulty grade (at a lower elevation than indicated), correct the faulty grade as specified below:
1. In uniform, stable, dry soils, correct the faulty grade with granular embedment material thoroughly compacted to 95 percent of the maximum density measured in accordance with ASTM D4253.
 2. In soft spongy disintegrated soils or where necessary to allow proper drainage, correct the faulty grade with coarse gravel compacted to 95 percent of the maximum density measured in accordance with ASTM D4253.
 3. Correct faulty grade at no additional cost to Owner.
- E. Care of Surface Material for Reuse: If local conditions permit reuse, keep surface material suitable for reuse separate from the general excavation material.
- F. Trenching Methods: The use of any suitable trench digging machinery is permitted except in places where such operations may cause damage, above or below ground, in which case, employ hand methods.
- G. Pipe Clearance in Rock: Remove ledge rock, rock fragments, shale, or other rock to provide proper clearance for bedding materials. Provide adequate clearance for properly jointing pipe laid in rock trenches at bell holes.
- H. Open Trench:
1. Owner shall have the right to limit the amount of trench which may be opened or partially opened at any time in advance of the completed line; and also the amount of trench left not backfilled.
 2. Not more than 150 feet of trench shall be left open unless otherwise permitted in writing by the Owner.
 3. Backfill and/or protect trenches as necessary to prevent injury to adjacent property, Owner's personnel, livestock, and the public.
 4. Trenches left open at night shall be fenced with adequate construction fencing. No trenches in streets or populated areas shall be left open at night.
 5. These requirements are minimum standard for trenching and more stringent construction requirements may be located elsewhere in the Contract Documents. The most restrictive requirements shall apply.

3.03 BACKFILL

- A. Time of Backfilling: Backfill operations shall immediately follow pipe jointing, joint coating application, and curing.
- B. Braced and Sheeted Trenches: Remove sheeting and shoring as backfilling operations progress. Incorporate methods so that a good bond is obtained between the backfill material and the undisturbed trench walls.

- C. Protection of Pipe During Backfilling Operations: Take the necessary precautions to protect the pipe during backfilling operations. Take care to prevent damage to the pipe or to the pipe coating, and repair any damaged pipe before it is backfilled. Backfill the trench in a method to prevent the deformation or other deflection of the cylindrical shape of the pipe by more than the allowable pipe deflection as specified elsewhere.
- D. Bedding within Pipe Zone:
 - 1. Concrete Cradle, Encasement or Concrete Arch: Where indicated, install the pipe in concrete cradle, encasement, or concrete arch. Take precautions to prevent pipe movement or deflection during construction. Where pipes are placed below structures, completely encase pipes in 1500 psi concrete, and extend up to bottom of structure.
 - 2. Concrete Blocking: Place blocking to rest against firm undisturbed trench walls. The supporting area for each block shall be at least as great as that indicated and shall be sufficient to withstand the thrust, including water hammer, which may develop. Each block shall rest on a firm undisturbed foundation of trench sides and bottom.
- E. Aggregate Fill Bedding:
 - 1. After the trench has been cut to the depths indicated, bring up the bedding layer to a point slightly above grade in maximum 4-inch lifts and uniformly compact to the density indicated. Form bell holes and scoop out a trough to grade so that the pipe is uniformly supported by the embedment material. Lay and joint the pipe. Bring up the embedment material in maximum 4-inch lifts on either side of the pipe to the elevation above the pipe shown on the Drawings. Uniformly compact the pipe as indicated.
 - 2. After moisture is gone from the embedment material, place utility detection tape and backfill and compact the remaining backfill by tamping or other appropriate methods. Water jetting shall not be permitted.
 - 3. Install utility detection tape and tracer wire.
- F. Compaction Requirements:
 - 1. Compact earth fill and cohesive aggregate fill in maximum 4-inch lifts with pneumatic rollers or power hand tampers and make a minimum of eight passes.
 - 2. Compact cohesionless aggregate fill in maximum 4-inch lifts with vibratory rollers or vibratory plate power hand compactors and make a minimum of eight passes.
 - 3. The acceptability of the compaction equipment shall be based upon the results of a test section. Compact earth fill and aggregate fill to a minimum of 95 percent of maximum dry density as determined by ASTM D698, Standard Proctor.
 - 4. Compact Class 1 and 2 earth fill at a moisture content within minus 0 to plus 5 percentage points of the optimum moisture content. Compact the remaining classes of earth fill and cohesive aggregate fill at a moisture content within minus 2 to plus 5 percentage points of optimum moisture content. The moisture ranges listed above are minimum and maximum limits. A tighter moisture range within these limits may be required to consistently achieve the specified density.
 - 5. Compact cohesionless aggregate fill at a moisture content within a range that accommodates consistent placement and compaction to achieve the density specified above.

6. Owner will arrange and pay for density and moisture testing. The testing frequency and methods shall be as requested by the Engineer. Engineer may waive testing requirements on cohesionless bedding where testing is not practical because of limited space between the pipe and trench walls, however, the minimum number of passes of the compaction equipment specified above shall be achieved.

3.04 FINISHING

- A. Grade and rake areas smooth and even which do not receive any type of paved surface, to allow drainage to drain away from the structures and toward the roads and streets or the natural drainage course. Break up large clods of earth and remove rocks, trash or debris near the surface.
- B. Finish the top portion of backfill beneath established sodded (lawn) areas with not less than 6 inches of topsoil corresponding to, or better than, that underlying adjoining sodded areas.

3.05 FIELD QUALITY CONTROL

- A. Compact backfill and appropriate embedment material to a minimum of 95 percent of maximum density at a moisture content of 0 to plus 5 percent of optimum for backfill and at optimum for sand-cement embedment as determined by ASTM D698, Standard Proctor.
- B. Make periodic tests of compaction for conformance with this Section by an approved testing laboratory selected and paid for by the Owner. Contractor shall pay for re-testing until acceptable test results are obtained.

3.06 CLEAN AND ADJUST

- A. Remove surplus pipeline materials, tools, rubbish and temporary structures and leave the construction site clean, to the satisfaction of the Engineer. Grade the surface and re-establish drainage. Removal of rock and other excess excavated material and general leveling and grading of the Site shall be part of the bid price and no additional payment shall be made.

END OF SECTION

31 23 36 TRENCH SAFETY

1.00 GENERAL

1.01 WORK INCLUDED

- A. This specification is for the purpose of providing minimum performance specifications and consists of the basic requirements which the Contractor must comply with in order to provide for the safety and health of workers in a trench.
- B. Contractor shall develop, design, and implement the trench safety system and will be solely responsible for the adequacy of the trench safety system and providing “a safe place to work” for the workman.
- C. Should the trench safety protection system require wider trenches than specified elsewhere, the Contractor shall be responsible for the costs associated with determining adequacy of pipe bedding and class, including the purchase and installation of alternate materials.
- D. Contractor shall comply with all applicable federal, state, and local rules, regulations, and ordinances related to trench excavation and safety.

1.02 STANDARDS

- A. The following standard shall be the minimum governing requirement of this specification and is hereby made a part of this specification as if written in its entirety.
 - 1. Occupational Safety and Health Administration (OSHA): 29 CFR Part 1926 - Safety and Health Regulations for Construction, Subpart P – Excavations.

2.00 PRODUCTS (NOT APPLICABLE)

3.00 EXECUTION (NOT APPLICABLE)

END OF SECTION

Division 32
Exterior Improvements

32 01 29 RIGID PAVING REPAIR

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to repair and resurface pavement. This section shall govern for the repair or replacement of pavement or other improved surfaces damaged or destroyed in performing the construction of water and sewer lines. Construction of such projects below pavement subgrade is covered by Section 31 23 33 "Trenching and Backfill."

1.02 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:
 - 1. Proposed material list and sources as Record Data.
 - 2. Experience record of proposed paving subcontractor as Record Data.

1.03 STANDARDS

- A. The applicable provisions of the following standards shall apply as if written here in their entirety:
 - 1. Oklahoma Department of Transportation (ODOT), Standard Specifications for Construction of Highways, Streets, and Bridges, latest edition.

1.04 JOB CONDITIONS

- A. Do not place materials when, in the opinion of the Owner's Representative, weather conditions are unsuitable. Do not place concrete when the temperature is 40 F and falling. Concrete may be placed when temperature is above 35 F and rising. Do not place asphalt or asphaltic concrete when the temperature is below 50 F and falling. Asphalt or asphaltic concrete may be placed when temperature is above 40 F and rising.

2.00 PRODUCTS

2.01 MATERIALS

- A. Concrete Pavement:
 - 1. Concrete: Conforming to Section 03 30 00.1 "Cast-In-Place Concrete (Limited Applications)."
 - 2. Reinforcing Steel: Of the same size and spacing as in the existing concrete pavement unless otherwise indicated. New billet steel, deformed bars, conforming to ASTM A615, Grade 60.
- B. Asphalt Pavement:
 - 1. Hot Mix Asphaltic Concrete:
 - a. Conforming to ODOT Standard Specifications, Section 411.

- b. Asphaltic Materials Used in the Mix: Conforming to ODOT Standard Specifications, Section 708.
 - c. Aggregate: Conforming to ODOT Standard Specification, Section 708.02.
- 2. Flexible Base: Of the depth and to the extent shown on the plans or match existing conditions. Unless otherwise shown on plans, flexible base shall be one or more of the following listed options:
 - a. Flexible Base Material: Conforming to ODOT Standard Specifications, Section 703, Type A, B, C, or D.

3.00 EXECUTION

3.01 PREPARATION

- A. Concrete Pavement: Cut pavement in parallel straight lines a minimum of 1 foot outside trench walls on each side to permit pavement removal before trench excavation. Make cuts by sawing partial pavement depth to avoid cutting reinforcing steel. After concrete pavement is broken up and removed, cut off existing reinforcing steel to provide a minimum of 30 bar diameters lap with new reinforcing steel on each side and bent back to clear the trench for excavation and pipe laying.
- B. Asphalt Pavement: Cut paved surface in parallel straight lines outside trench walls prior to trench excavation. Before pavement replacement has begun, make additional straight line cuts and remove pavement a minimum of 1 foot outside trench walls.
- C. Subgrade: The subgrade, including granular trench backfill, shall be approved by the Owner's Representative before any base or pavement surface is replaced. Moisten, reshape, and re-compact subgrade as necessary to receive the base material.

3.02 INSTALLATION

- A. Concrete Pavement Replacement:
 - 1. Install reinforcing steel on the approved subgrade and securely tie in place. Bend down existing reinforcing into proper position and securely tie each bar to new reinforcing bars. Support and tie reinforcing to steel bar chairs or other suitable supporting devices. New reinforcement shall be of equal size and spacing to existing steel, unless otherwise indicated. Install substantial forms to proper grade at pavement edges.
 - 2. Rapidly deposit concrete on the subgrade in successive batches and distribute to the required depth and for the entire width of the pavement by shoveling or other approved methods. Do not use rakes in handling concrete. The placing operation shall be continuous. Level the concrete, as soon as placed, and then struck off and screed to such elevation above grade that when consolidated and finished the surface of the pavement shall be at the proper elevation. Tamp the entire surface and consolidate the concrete so as to insure maximum compaction and a minimum of voids.
 - 3. After final floating and while the concrete is still workable, finish the surface to provide a uniform surface of gritty texture by brooming, use of belting, burlap drags or other approved methods.

4. Cure the concrete with an approved curing compound or other approved means. Concrete pavement shall not be opened to traffic until it has gained sufficient strength to withstand traffic without damage unless approved protective devices are provided. Concrete pavement at an age of 7 days or a strength of 2000 psi may be opened to traffic.
- B. Flexible Base:
1. Where the base course exceeds 6 inches in thickness, construct the flexible base in two or more courses of equal thickness. Wet, manipulate, and compact material to 95 percent maximum density as determined by ASTM D698. Where deemed necessary by the Owner's Representative, apply a uniform application of prime coat asphaltic material to the surface of the prepared subgrade, applied at a rate of not less than 0.30 gallon per square yard of surface.
 2. Where plant mix asphalt material is used for base, construction shall be in accordance with ODOT Standard Specifications, Section 703, as applicable to small areas.
- C. Asphalt Pavement Replacement:
1. Hot Mix Asphaltic Concrete: Apply prime coat to base or tack coat base as indicated. Coat contact surfaces of pavement edges and structures with asphalt before any pavement is placed. Do not place pavement until the Owner's Representative has approved the base. Hauling or transporting of the material to the project site, placing, compaction, and shaping shall be in accordance with ODOT Standard Specifications as applicable for small areas. After final compaction of the pavement, no vehicular traffic of any kind shall be permitted until the pavement has cooled and hardened for at least 6 hours. Smooth the finished surface course, upon completion of final rolling true to grade and cross-section. Immediately correct low or defective areas by cutting out the faulty areas and replacing with fresh, hot mixture. Compact the area to conform to the remainder of the pavement.
 2. Two-Course Asphalt Surface Treatment: On the approved surface of the finished base, asphalt at the rate of 0.20 to 0.30 gallons per square yard shall be applied by an approved distributor so operated to result in a uniform, proper distribution at the correct temperature. Immediately cover the surface with No. 1 aggregate, distribute at a rate of one cubic yard per 80 square yards, broom as necessary for uniform distribution, and roll with a flat wheel roller of ample weight. Make a second application of asphalt in the manner specified for the first application, at a rate of 0.30 to 0.40 gallon per square yard. Make the second application with No. 2 aggregate at a rate of one cubic yard per 110 square yards and process as specified for the first application. After the work has been completed, there should be a slight excess of aggregate on the surface.
- D. Other Improved Surfaces: Where water, storm drains, or sewer lines to be constructed traverse or cross through gravel surfaced public roads or shoulders, or private dirt or gravel driveways or parking areas, replace the surface with a quality material, workmanship and at a thickness at least equal to the existing surfaces.

END OF SECTION

32 91 19.13 TOPSOIL PLACEMENT AND GRADING

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to place topsoil, free from rock and foreign material in areas designated to receive sodding or seeding.

2.00 PRODUCTS

2.01 TOPSOIL

- A. General: The topsoil shall be fertile loam, easily cultivated and free from objectionable material, and shall have a relatively high erosion resistance and be readily able to support the growth of the planting, seeding, or sodding specified on the plans.
- B. Sources:
 - 1. The topsoil may be obtained from the right-of-way at sites of proposed excavation, or it may be obtained from sources outside the right-of-way, secured by the Contractor, and meeting the approval of the Engineer.
 - 2. Topsoil required in addition to salvaged topsoil from the project shall be secured from approved off-site borrow sources. Excavated material from construction which is suitable for topsoil shall be salvaged and used before any topsoil is obtained from borrow source.

3.00 EXECUTION

3.01 INSTALLATION

- A. Stockpile topsoil material at locations approved by the Owner's Representative. Remove any trash, wood, brush, stumps or other objectionable materials prior to placement. The source and stockpile areas shall be kept drained and in a neat and presentable condition. Place and spread topsoil to a uniform depth to provide 6-inch compacted depth, while maintaining drainage in areas to be seeded or sodded.

END OF SECTION

32 92 00 SODDING

ARTICLE 1: GENERAL

1.01 SECTION INCLUDES

- A. Provide materials, labor to install and maintain for the guarantee period all areas sodded.

1.02 RELATED SECTIONS

- A. Section 32 80 00 "Landscape Irrigation System."
- B. Section 32 93 00 "Trees, Shrubs, and Groundcover."

1.03 DEFINITIONS

- A. Sod: Thick matting of growing and living grass on a smooth bed free of foreign material, rocks larger than 1 inch in diameter and weeds.
- B. Stand of Grass: A uniform growth of specified grass plants covering all bare ground surface areas designated on the Drawings.

1.04 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Official Method of Analysis of the Association of Official Analytical Chemists.
 - 2. American Sod Producers Association (ASPA), latest edition.
- B. Source Quality Control:
 - 1. Owner reserves right to inspect and approve the sod before it is cut at the source of the sod.
 - 2. Inspection of sod at the source does not preclude the right of rejection at the Site.

1.05 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Sodding shall be completed on or before August 1 or as approved by Owner.
 - 2. Frozen sod may not be used nor shall sod be placed on frozen ground.
 - 3. In times of drought, special provisions must be made to prevent the drying of the sod. All provisions shall be approved by the Owner.
 - 4. Do not sod when soil is excessively wet or dry.
- B. Protection: Restrict foot and vehicular traffic from sodded areas after laying until final inspection and acceptance.

1.06 GUARANTEE

- A. Substantial Completion: Sod shall be approved as being in accordance with the Specifications upon completion of the installation.

- B. Guarantee Period: A stand of grass for 90 days after Substantial Completion shall be guaranteed.
- C. Maintenance Period:
 - 1. Maintain newly laid sod until entire Project is accepted by the Owner.
 - 2. Any sodded areas that become eroded, damaged or any areas of sod that fail to become established satisfactorily, according to the Owner, shall be repaired and/or replaced at no additional expense to the Owner.
 - 3. Repair construction related damage to other plants or lawns during the maintenance period at no additional expense to the Owner.
 - 4. Maintenance shall consist of, but not be limited to:
 - a. Weeding.
 - b. Watering.
 - c. Mowing and Edging.
 - d. Spraying.
 - e. Fertilizing.
 - f. Repair of Erosion Damage.
- D. Final Acceptance will be provided by the Owner only upon completion of the entire Project and the establishment of a stand of grass as defined herein.

ARTICLE 2: PRODUCTS

2.01 MATERIALS

- A. Sod:
 - 1. Species: Tifway 419 Bermuda (*Cynodon dactylon*) for all areas.
 - 2. The sod shall be free of weeds or undesirable foreign plants, large stones, roots or other materials which might be detrimental to the development of the sod or to future maintenance.
 - 3. Sod shall be cut with approved sod cutters so that after it is placed, but before it is compacted, it shall have a uniform thickness of not less than 3/4 inch. The sod sections shall be cut in uniform widths, not less than 10 inches and in lengths of not less than 18 inches.
 - 4. Sod shall be uniform in color, leaf texture and shoot density.
- B. Fertilizer:
 - 1. Uniform composition.
 - 2. Pelletized.
 - 3. Containing following minimum percentage of plant food by weight:
 - a. Nitrogen: 8 percent.

- b. Phosphoric Acid: 4 percent.
 - c. Potash: 24 percent.
- 4. The fertilizer shall be delivered to the Site in bags or other sealed containers, each fully labeled, conforming to the applicable state fertilizer laws, and bearing the name, trade name or trademark and warranty of the producer.
- C. Water: Potable, available on-site. Contractor shall furnish temporary piping, hoses and connections as required.

ARTICLE 3: EXECUTION

3.01 INSPECTION

- A. Check that preceding Work affecting ground surface is completed, properly graded and drains well.
- B. Verify that soil is within allowable range of moisture content.
- C. See that the soil is free of weeds and foreign material immediately before sodding. Remove rocks and stones which are larger than 1 inch in diameter, remove from the Site and dispose of in an approved location.
- D. Do not start Work until conditions are satisfactory. To begin Work indicates acceptance of conditions.

3.02 PREPARATION

- A. All areas to be sodded are to be bladed and graded smooth. All clods shall be removed or be incorporated into existing soil. All debris shall be disposed of off-site at an approved location.
- B. Till fertilizer into top 2 inches of soil at rate of 125 pounds per acre.

3.03 APPLICATION

- A. The sod shall be moist and shall be placed on a moist soil bed.
- B. Sod shall be harvested, delivered and laid within a period of 24 hours, unless a suitable preservation method is approved prior to delivery. Sod not transplanted within this period shall be inspected for acceptance by the Owner prior to its installation.
- C. The sod shall be carefully placed by hand, edge to edge (with no gaps), and with staggered joints in rows parallel with the contours. Do not stretch or overlap sod.
- D. The sod shall immediately be pressed firmly into contact with the sod bed by rolling with approved equipment to provide a true and even surface.
- E. Screened soil of acceptable quality shall be used to fill all cracks between pads of sod; however, the quantity of the top dressing soil shall not be so great as to smother the grass.
- F. The surface of the soil in the sod after compaction shall be flush with or just below adjacent paving.
- G. Water sodded areas to a minimum depth of 2 inches after planting.

3.04 PROTECTION

- A. Immediately after sodding, erect barricades and warning signs as required to protect the areas from traffic until sod is established.

3.05 SOD ESTABLISHMENT

A. Watering:

1. The sod shall be kept moist from the time of its placement until it has become established and its continued growth ensured.
2. Watering shall be done at a rate which will avoid erosion and excessive runoff.

B. Mowing:

1. When grass reaches approximately 4 inches in height, mow to 2 to 2-1/2 inches in height.
2. Do not cut off more than 40 percent of grass leaf in single mowing.
3. Do not remove grass clippings.

- C. Repairing: Any areas that become eroded, damaged or any areas of sod that fails to become established satisfactorily, according to the Owner, shall be repaired and/or replaced at no expense to the Owner.

3.06 RESTORATION

- A. Repair damages done to the Site caused by the Contractor at no additional expense to Owner.

3.07 CLEANING

- A. Remove trash and excess materials from the Site.
- B. Maintain paved areas in clean condition.
- C. Remove barriers and signs from the Site at termination of the maintenance period.

END OF SECTION

Division 33
Utilities

35 05 01.02 DUCTILE IRON PIPE & FITTINGS

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to install ductile iron pipe and fittings, including taps, connections, and appurtenances as required for a functional system as indicated herein. Unless otherwise noted, all above grade exposed pipe, fittings, and appurtenances shall be flanged while below grade piping, fittings and appurtenances shall be mechanical joint or push on joints. Trenching, backfilling, and pipe embedment shall be as shown on the Drawings and in accordance with Section 31 23 33 "Trenching and Backfill."

1.02 QUALITY ASSURANCE

- A. Factory Testing: The manufacturer shall perform all tests as required by AWWA C151. Welded outlets shall be hydrostatically tested at a pressure of 250 psi for a period of 1 hour. No leakage shall be allowed.
- B. Experience Requirements: Pipe shall be the product of a manufacturer who has a minimum of 10 years' successful experience manufacturing pipe of the particular type specified and the total pipeline shall be the product of one pipe manufacturer. The manufacturer shall have a minimum of 10 years' successful experience in the design and manufacturing of pipe joints of similar design, working pressure, pipe diameter and wall thickness as specified.
 - 1. Approved manufacturers are:
 - a. American
 - b. U.S. Pipe
- C. Owner Testing and Inspection:
 - 1. Pipe may be subject to inspection by an independent testing laboratory, which laboratory will be selected and retained by the Owner. Representatives of the laboratory or the Engineer shall have access to the Work whenever it is in preparation or progress, and the pipe manufacturer shall provide proper facilities for access and for inspection. The pipe manufacturer shall notify the Owner in writing, at least 2 weeks prior to the pipe manufacture so that the Owner may advise the manufacturer as to the Owner's decision regarding tests to be performed. Material and pipe which are discovered to be defective, or which do not conform to the requirements of this Section shall be subject to rejection at any time prior to final acceptance of the pipe. After final acceptance, each joint of pipe shall be stamped as approved by the laboratory.
 - 2. It is anticipated that production of pipe shall be done over a normal period of time and without "slow-downs" or other abnormal delays. In the event that an abnormal production time is required, and the Owner is required to pay excessive costs for inspection, then the Contractor shall be required to reimburse the Owner for such laboratory costs over and above those which would have been incurred under a normal schedule of production.

- D. Pipe Classification: Pipe manufacturer shall manufacture the pipe to meet the installation conditions, cover depth, and bedding and backfill requirements as shown on the Drawings or specified and furnish the correct class of pipe to meet these conditions. If additional requirements are required, pipe manufacturer shall coordinate their requirements with the Contractor.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01330 "Document Management" and shall include:
1. Record Data: Catalog data, including dimensions of new pipe and fittings and recommendations for handling and storage; details of lining and coating; thrust restraint provisions; hydrostatic pressure test plan and results; affidavit stating the pipe furnished complies with AWWA C151, AWWA C104, AWWA C110, AWWA C111, and these specifications; mill certificates, including chemical and physical test results for each heat of metal, if requested during pipe manufacturing operations; record drawings, including a schematic location-profile and a tabulated layout schedule, referenced to the pipeline stationing.
 2. Shop Drawings: Mechanical joint connections; connections to differing pipe materials.
 3. Certified Test Data: Certified Test Reports from the manufacturer's testing facility or an Owner approved testing laboratory; results of factory hydrostatic tests; pipe and fitting certification for conformance to ANSI/NSF 61.

1.04 REFERENCE SPECIFICATIONS

- A. Section 02217 31 23 33 "Trenching and Backfill."

1.05 STANDARDS

- A. Except as modified herein, the applicable provisions of the following standards shall apply as if written here in their entirety:
1. American Water Works Association (AWWA) Standards:

AWWA C104	Standard for Cement Mortar Lining for Ductile Iron Pipe and Fittings
AWWA C105	Standard for Polyethylene Encasement for Ductile Iron Piping
AWWA C110	Standard for Ductile Iron and Gray Iron Fittings
AWWA C111	Standard for Rubber Gasket Joints for Ductile Iron Pipe and Fittings
AWWA C150	Standard for Thickness Design of Ductile Iron Pipe
AWWA C151	Standard for Ductile Iron Pipe
AWWA C153	Standard for Ductile-Iron Compact Fittings for Water Service
AWWA C600	Standard for Installation of Ductile Iron Water Mains and Appurtenances
AWWA C606	Grooved and Shouldered Joints

2. Steel Structures Painting Council (SSPC) Standard: SSPC SP6, Commercial Blast Cleaning.
3. All ductile iron pipe and fittings for potable water systems shall conform to American National Standards/National Science Foundation (ANSI/NSF) Standard 61 and must be certified by an organization accredited by ANSI.

1.06 DELIVERY AND STORAGE

- A. Handling and storage of pipe and fittings shall comply with AWWA C600 and the manufacturer's recommendations. It is desired that the pipe be hauled direct from the pipe plant to the right-of-way and strung along the pipeline route, thus avoiding rehandling of the pipe and the possibility of damage thereto. Where fully loaded truck and trailer cannot operate along the pipeline route, pipe may be unloaded at access points along the route and brought to the trench side by approved methods; however, the Contractor shall be responsible to ensure that the pipe is undamaged at the time of laying.

1.07 GUARANTEES

- A. The product shall be warranted and guaranteed per the General Conditions of the Specifications.

2.00 PRODUCTS

2.01 MATERIALS

- A. Ductile Iron Pipe:
 1. Ductile iron pipe shall be made of ductile iron in accordance with AWWA C151. All ductile iron pipe shall have a minimum working pressure as indicated on the Drawings. Pipe shall be rated for pressure in accordance with AWWA C151 for pressure class of pipe as indicated. Standard joint length shall be 18 to 20 feet. Flanged ductile iron pipe shall be in accordance with AWWA C115.
 2. Pipe manufacturer shall manufacture the pipe to meet the installation conditions, cover depth, and bedding and backfill requirements as shown on the Drawings or specified and furnish the correct class of pipe to meet these conditions.
- B. Fittings: Fittings shall be ASTM A536 ductile iron or ASTM A48 cast iron in accordance with AWWA C110. Fittings shall be rated for a minimum working pressure of 250 psi, unless specified otherwise. Factory welded outlets may be used in lieu of tee fittings for 18-inch and larger tee fittings. Factory welded outlets shall have a minimum pressure rating of 250 psi. Factory welded outlets may not be used near sources of vibration, such as pump stations or roads.
- C. Joints for Pipe and Fittings:
 1. Joints shall be in accordance with AWWA C110, AWWA C111, and AWWA C151. Standard joints for ductile iron pipe and fittings shall be push-on. Where indicated, joints shall be mechanical joint, flanged, or grooved.
 2. Flanged joints shall have pressure ratings equal to or greater than adjacent pipe. Flange pattern shall match pattern of valve, fitting, or appurtenance to be attached. Flanges on ductile iron pipe shall be ductile iron.

D. Provisions for Thrust:

1. Thrust at bends, tees, plugs, or other fittings shall be resisted by restrained joints. If thrust cannot be accommodated using restrained joints, thrust blocking or concrete anchors to restrain thrust may be used on a case-by-case basis when approved by the Engineer.
2. Restrained joints shall be used for a sufficient distance from each bend, tee, plug, or other fitting to resist thrust which will be developed at the design pressure of the pipe. For the purpose of thrust restraint, design pressure shall be 1.5 times the design working pressure class indicated.
3. The length of pipe with restrained joints to resist thrust forces shall be determined by the pipe manufacturer in accordance with Thrust Restraint Design for Ductile Iron Pipe, Ductile Iron Pipe Research Association using the following parameters:
 - a. Laying condition equal AWWA C600 Type 4 bedding.
 - b. If polyethylene encasement is used, restrained length shall be doubled to account for reduced soil to pipe friction resistance.
4. Where indicated and where required for thrust restraint, joints shall be restrained. Restrained joints shall be mechanically interlocking joints. Restrained joints shall be U.S. Pipe "TR Flex", American Ductile Iron Pipe "Flex Ring", or Clow Corporation "Super-Lock". Restraining fittings using set screws, restraining gaskets, gripper type glands, and field-cuts of restrained joints shall be Mega-Lug, or approved equal. Field welding shall not be allowed. Restrained joints shall be capable of sustaining the design pressure as specified herein.

E. Coating:

1. Coat the exterior of the pipe and fittings with a 1 mil bituminous coating in accordance with AWWA C110 and AWWA C151, unless specified otherwise.
2. All ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179 before applying the bituminous coating asphaltic top coating in accordance with the pipe manufacturer's recommendations. All ductile iron fittings shall be coated with a layer of Fusion-Bonded Epoxy in accordance with AWWA C116.
3. In addition to the factory applied asphaltic coating, all buried ductile iron pipe and fittings shall have two layers of tube-type polyethylene encasement in accordance with AWWA C105. Polyethylene encasement shall be 16 mils thick. Both ends of the pipe shall be thoroughly sealed with adhesive tape or plastic tie straps at the joint overlap. Place circumferential wraps of tape at 2-foot intervals along the barrel of the pipe to minimize the space between the encasement and the pipe. Pipe shall be wrapped with V-BIO Enhanced Polyethylene Encasement in accordance with manufacturers recommendation.

- F. Lining: Ductile iron pipe and fittings shall have a cement mortar lining in accordance with AWWA C104 and bituminous seal coat. Thickness of lining shall be as specified in AWWA C104. Air piping shall not be lined.

G. Flexible Joint Couplings:

1. Flexible joint couplings shall be Dresser Style 38, Rockwell Style 411, Victaulic Depend-O-Lok - E x E, Type II or approved equal, unless otherwise shown.
2. Provide restrained flexible joint couplings or restrained flexible joints on all pipes connecting to concrete structures and at other locations shown on the Drawings. Restrained flexible couplings shall be Victaulic Depend-O-Lok F x F Type II or approved equal. Restrained flexible joints shall be U.S. Pipe "TR Flex", American Ductile Iron Pipe "Flex Ring", Clow Corporation "Super-Lock", or approved equal.

- H. Insulated Connections: Where insulated connections are indicated, the pipe manufacturer shall furnish dielectric insulation gaskets, sleeves, and two plastic washers for each bolt. Insulating kits shall be Insulket or approved equal.

3.00 EXECUTION

3.01 INSTALLATION

- A. General: Install ductile iron pipe, fittings, specials, valves, and hydrants in accordance with AWWA C600 and the Specifications. Trenching and backfilling shall be in accordance with Section 31 23 33 "Trenching and Backfill." Before lowering into the trench, inspect each joint of pipe. Pipe will then be accepted, rejected, or repaired.
- B. Pipe Laying: Lower pipe, fittings, and special castings into trench by crane or other suitable method. Do not roll in or "dump" into the trench. Handle pipe and fittings with belts, slings, or other equipment designed to prevent damage to the pipe and coating. Remove dirt and trash that may be in the barrel of the pipe, on the spigot or in the bell while the pipe is suspended. Keep the pipe clean during the laying operation and free of sticks, dirt, and trash, and at the close of each operating day seal the open end of the pipe with a gasketed night cap. Do not lay pipe in water.
- C. Pipe Alignment: Install pipe and fittings to the line and grade indicated. In areas where the line and grade indicated cannot be achieved using standard manufactured bends and fittings, make slight adjustments by deflecting joints. Joint deflections may not exceed the lesser of the maximum deflections stipulated in AWWA C600 or 75 percent of the manufacturer's maximum recommended deflection. Resolve any conflicts with existing utilities and structures.
- D. Joint Making:
 1. Jointing Mechanical Joint Pipe:
 - a. Joint this type of pipe in accordance with the manufacturer's recommendations, with uniform torque on bolts.
 - b. After carefully cleaning both spigot and bell and after slipping the follower ring and gasket over the spigot end, slip the spigot into the bell. Apply a lubricant to the spigot to assist in assembly.
 - c. Carefully seat the gaskets by hand to be even in the bell at all points.
 - d. After drawing up the follower ring to uniform bearing against the gasket, insert the bolts and tighten by hand in pairs using bolts opposite each other.

- e. Tighten the nuts to hold the required pressure. Extension wrenches or pipes over wrench handles shall not be permitted. Use 10-inch ratchet wrenches to tighten the nuts to a uniform torque.
 - f. The finished joint shall be watertight.
- 2. Making Flanged Joints: Erect flanged pipe in accordance with the controlling dimension as specified. Thoroughly clean each piece of flanged pipe to remove dirt, rust, grease, and other foreign matter. Thoroughly wire brush flanged faces to ensure even bearing for gaskets and mating flanges. Place full face gasket, use drift pins to align holes, and tighten flange bolts, each in turn, at a uniform torque around the joint. Finished joints shall be watertight.
- 3. Making Push-On Joints:
 - a. The jointing of this type of joint shall be as recommended by the manufacturer. The procedure for jointing shall be generally as follows:
 - 1). Thoroughly clean and dry the spigot and bell before starting the assembly of the joint. Wipe the gasket clean with a cloth.
 - 2). Place the gasket into the gasket seat in the bell.
 - 3). Apply a thin film of lubricant to the surface of the gasket that will come in contact with the entering pipe spigot. If necessary, also apply lubricant to the spigot.
 - 4). Make the joint by exerting sufficient force on the entering pipe so that its plain end will move past the gasket to the seat of the bell.
 - 5). If restrained joints are used, orient pipe to permit ease of assembly. Place locking device after installation of spigot into bell.
 - b. installation instructions.
- 4. Making Split-Sleeve Coupling Joints:
 - a. Exterior surfaces of the pipe shall be clean, smooth and free from weld beads, seams, scars, indentations, roll marks, exterior coatings and flat spots.
 - b. Install split-sleeve couplings in accordance with the manufacturer's latest installation instructions.
- E. Polyethylene Encasement: Wrap bituminous coated ductile iron pipe in polyethylene encasement in accordance with AWWA C105. Repair or replace encasements which have tears, rips, or punctures in the polyethylene wrap.
- F. Painting: Paint piping which is submerged or exposed to the atmosphere in accordance with Section 09905 "High-Performance Coatings."

3.02 FIELD QUALITY CONTROL

- A. Perform a hydrostatic test as specified in Section 33 05 05.31 "Hydrostatic Testing."
- B. Disinfect the piping system as specified in Section 33 12 19 "Disinfecting of Water Utility Distribution."

END OF SECTION

33 05 05.31 HYDROSTATIC TESTING

1.00 GENERAL

1.01 WORK INCLUDED

- A. Hydrostatically test new pipe between valves or plugs at the pressure and for the duration specified.
- B. Additional plugs may be installed to reduce the length of each test section. No additional compensation will be paid if additional plugs are used.
- C. Provide a pressure reducing backflow preventer and all temporary piping, pumping, fittings and gauges required to fill, test and then drain the pipe.
- D. Do not begin test until pipe has been backfilled for at least 7 days.

1.02 SUBMITTALS

- A. Submit detailed hydrostatic test procedure 10 days prior to conducting the test.
- B. Submit Hydrostatic Pipe Test Reports per Section 01 33 00 "Document Management."

1.03 STANDARDS

- A. The applicable provisions of the following standards shall apply as if written here in their entirety:

- 1. ASTM International (ASTM):

ASTM F2164	Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping Systems Using Hydrostatic Pressure
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- 2. American Water Works Association (AWWA):

AWWA C200	Steel Water Pipe, 6 In (150 mm) and Larger
AWWA C600	Installation of Ductile-Iron Mains and Their Appurtenances
AWWA C604	Installation of Buried Steel Water Pipe – 4 In. (100 mm) and Larger
AWWA C605	Underground Installation of Polyvinyl Chloride (PVC) and Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe and Fittings
AWWA M9	Concrete Pressure Pipe
AWWA M11	Steel Pipe – A Guide for Design and Installation
AWWA M23	PVC Pipe – Design and Installation
AWWA M41	Ductile-Iron Pipe and Fittings
AWWA M55	PE Pipe – Design and Installation

2.00 PRODUCTS

2.01 WATER FOR TESTING

- A. Obtain water for filling and testing the pipeline and provide all temporary pumps and piping necessary to fill the pipeline.
- B. If chlorinated water is used, then dechlorinate it before disposal per all regulations.

2.02 TEST PLUGS

- A. Design plugs or blind flanges to withstand the test pressure on either side with only atmospheric pressure on the opposite side.
- B. Provide a 30-inch access manhole in one side of the plug and a 12-inch flanged outlet on the other side of the plug unless shown differently on the Drawings.

3.00 EXECUTION

3.01 GENERAL

- A. Perform hydrostatic test in accordance with this Section, AWWA Standards, AWWA Manuals, and the supplier's recommendations.
- B. Leakage during hydrostatic testing shall not exceed 10gal/inch per mile of pipe per 24 hours at testing pressure in accordance with OAC 252:626-19-2(e).

3.02 TEST PRESSURE

- A. 1.5 x Pipe Pressure Rating

3.03 TEST PREPARATION

- A. Fill pipe at 0.5 feet per second in the main pipe.
- B. Verify all air valves are working and air is vented from temporary taps. Plug taps after test.
- C. Pressurize HDPE pipe to the test pressure and hold for 4 hours (this is the expansion phase). Add as much water as necessary to maintain the test pressure unless there is an obvious leak that must be fixed.
- D. Examine bulkheads, valves, manholes, flanges, and connections for leaks during this period. Stop any leaks before continuing.
- E. If an existing valve is in the test section, then coordinate with the Construction Manager to determine an approved method for measuring any leakage past the valve. Furnish all necessary equipment and include the cost for this effort in the Contract Price.

3.04 TEST DURATION

- A. After the expansion phase, test the section for 1 hour. If the test fails, then allow the pipe to relax for 8 hours before retesting.

3.05 EXAMINATION UNDER PRESSURE

- A. Decrease the pressure by 10 psi.
- B. Protect the gauge from direct sunlight during the test.
- C. Inspect the pipe during the test to locate any leaks or breaks, defective joints, cracked or defective pipe, fittings, or valves. Correct defective Work identified during the pressure test.
- D. Correct all identified leaks even if leakage is within the parameters for permissible make up water per Paragraph 3.06.
- E. Test the pipe again after defective Work has been corrected. If HDPE pipe has been under test pressure for 8 hours, then allow it to relax for 8 hours before retesting it. Repeat the test and correction of defective Work until satisfactory test results are obtained.

3.06 PERMISSIBLE MAKEUP WATER

- A. Makeup water is not allowed for HDPE. The test is acceptable if the pressure drops no more than 5 percent during the test phase. Retest the pipeline, after allowing it to relax for 8 hours, if the pressure drops more than 5 percent.

3.07 CORRECTIONS OF DEFECTS

- A. Repair any defective joints, cracked or defective pipe, fittings, or valves discovered in performance of this pressure test with sound material meeting the requirements of the Contract Documents and repeat the test until satisfactory results are obtained. Repair all noticeable leaks even if the actual leakage is within the allowable limits.

3.08 REMOVAL OF TEST PLUGS

- A. Remove test plugs once both sides of the pipeline have been tested. If another contractor may need the plug, then coordinate with them – the last contractor to need the plug shall remove it and repair the mortar lining.
- B. Leave the pipeline full of water upon completion of the hydrostatic test, except where internal test plugs must be removed to allow construction to continue.

END OF SECTION

33 05 23.33 PIPELINE CROSSING BY TUNNEL OR TRENCHLESS CONSTRUCTION METHODS

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to install casing pipe or tunnel liner plates by tunnel or trenchless construction methods as specified herein. This Section sets forth the requirements for construction and installation of pipelines crossing roadways using horizontal auger boring, a jacking shield, or hand tunneling methods.

1.02 QUALITY ASSURANCE

A. Qualifications:

- 1. Tunnel or Trenchless Contractor: Unless specified otherwise, tunnel or trenchless construction shall be performed by a competent, experienced contractor or subcontractor. The tunnel or trenchless contractor or subcontractor shall have a satisfactory experience record of at least 5 years engaged in similar work and shall demonstrate successful completion of at least three previous projects within the last 5 years using tunnel or trenchless methods similar to those proposed involving installation of casing pipe or tunnel liner plate equal to or greater than the diameter as that proposed and in similar ground conditions anticipated for this Project.

- B. Performance Requirements: Horizontal or vertical variation in the final position of the casing pipe or tunnel liner plate from the proposed line and grade shall be permitted only to the extent of the tolerances provided herein, provided that such variation shall be regular and only in the direction that will not detrimentally affect the installation or intended function of the carrier pipe in the opinion of the Engineer.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:

- 1. Copies of permit(s) as required herein for construction of the pipeline crossing, if required to be obtained by the Contractor.
- 2. Qualifications for the Contractor or subcontractor who is performing the tunnel or trenchless construction as required by Paragraph 1.02.A.
- 3. Pipeline Crossing Work Plan, which shall include, but not be limited to the following:
 - a. Site layout plan, including a plan view of the Contractor's proposed operations, including but not limited to dimensions of the pit excavations, dimensions of equipment to be utilized, location where excavated materials will be placed, location of where casing pipe or tunnel liner plate will be stored prior to installation, etc.
 - b. Product data, description of, and operation manual for auger boring, jacking shield, or hand tunneling equipment proposed to be used. Include capacity, number, and arrangement of hydraulic jacks as applicable. Provide details of thrust ring, jacking controls, and pressure gages as applicable.

- c. Means and methods to control of line and grade of equipment.
 - d. Theoretical volume calculation for the proposed excavation, including an estimated bulking factor.
 - e. Description of the proposed procedures for performing tunnel or trenchless excavation, including handling and disposal of excavated materials.
 - f. Description of the proposed procedures for installation of casing pipe, including jointing and welding procedures of casing pipe, as applicable.
 - g. Description of the proposed procedures for installation of tunnel liner plates, if used.
 - h. Product Data and proposed procedures for use of pipe lubrication materials proposed for use for installation of the casing pipe, if used.
 - i. Description of the proposed procedures for installation of the carrier pipe, including Product Data and Shop Drawings of casing spacers or insulators and end seals and dimensions and proposed locations of such to ensure line and grade.
 - j. Mix design for the proposed contact grout and backfill grout, including Product Data and applicable test reports for each constituent of the mix design.
 - k. Description of the proposed procedures for batching, mixing, pumping, and placement of contact grout and backfill grout.
4. Shop Drawings and mill test certificates of the casing pipe from the casing pipe manufacturer, including jointing and welding requirements, lubrication/grout ports or fittings, joint details, and other items to be furnished with and fabricated for the pipe. Include dimensions, tolerances, wall thicknesses, material properties and strength, and other pertinent information. Shop Drawings shall include calculations for the design of the casing pipe, including calculations for the anticipated jacking forces along the full length of the casing pipe installation and the maximum allowable jacking force that may be applied to the casing pipe without damage. Calculations shall be performed by a professional engineer licensed in the state where Project is located and retained by the Contractor. Calculations associated with the casing pipe are for record purposes only and will not be reviewed by the Engineer.
 5. Shop Drawings and mill test certificates of the tunnel liner plate and fasteners from the tunnel liner plate manufacturer. Shop Drawings shall include calculations for the design of the tunnel liner plate, including calculations for the maximum allowable jacking force that may be applied against the tunnel liner plate without damage. Calculations shall be performed by a professional engineer licensed in the state where Project is located and retained by the Contractor. Calculations associated with the tunnel liner plate are for record purposes only and will not be reviewed by the Engineer.
 6. Daily reports, to be submitted no more than 12 hours after the end of each shift, including, but not limited to the following:
 - a. Name of crew members and their classification, number of hours worked, quantity of materials installed or used, and a summary of the work activities, regardless of the amount of progress made.

- b. Starting and ending station of excavation face and limits of installation of casing pipe or tunnel liner plate completed.
 - c. Torque, jacking pressures, and other parameters measured by the excavation equipment as applicable.
 - d. Type and quantity of material excavated and removed compared to the theoretical volume.
- 7. As-built documentation, to be submitted no more than 1 week after completion of casing pipe or tunnel liner plate installation and another submittal no more than 1 week after completion of carrier pipe installation, which shall include, but not be limited to the following:
 - a. Name of Contractor and subcontractor, if applicable, and contact information.
 - b. Date of completion of installation.
 - c. Summary of type, size, and dimensions of casing pipe, tunnel liner plate, or carrier pipe installed.
 - d. Summary of project survey information.
 - e. Plan and profile drawing, including theoretical alignment, actual installed alignment, survey benchmarks, and other pertinent information such as adjacent structures or facilities.
- 8. Contingency plan that includes corrective actions to be taken in the event of excessive ground movement (settlement or heave), excessive deviation from line and grade, slower than anticipated progress, stuck excavation equipment, damage to an existing utility, or encountering greater than anticipated groundwater inflows.

1.04 STANDARDS

A. American Association of State Highway and Transportation Officials (AASHTO):

AASHTO	Standard Specifications for Highway Bridges
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B. American Society of Civil Engineers (ASCE):

ASCE MOP 106	Manual of Practice [for] Horizontal Auger Boring Projects
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C. ASTM International (ASTM):

ASTM A36/ A36M	Standard Specification for Carbon Structural Steel
ASTM A123/ A123M	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A135/ A135M	Standard Specification for Electric-Resistance-Welded Steel Pipe
ASTM A139/ A139M	Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS4 and Over)
ASTM A153/ A153M	Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A307	Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60,000 PSI Tensile Strength
ASTM A449	Standard Specification for Hex Cap Screws, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use
ASTM A572/ A572M	Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel
ASTM A1011/ A1011M	Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength

D. American Water Works Association (AWWA):

AWWA C200	Steel Water Pipe, 6 in. (150 mm) and Larger
AWWA C206	Field Welding of Steel Water Pipe
AWWA C210	Liquid-Epoxy Coatings and Lining for Steel Water Pipe and Fittings
AWWA M11	Steel Water Pipe – A Guide for Design and Installation

E. Railroad Crossing Standards:

BNSF Railway	Utility Accommodation Policy
Union Pacific	Pipeline Installation Requirements

1.05 JOB CONDITIONS; PERMITS AND EASEMENT REQUIREMENTS

- A. Traffic control devices, such as barricades and warning signs, and flagmen, when necessary and required by the authority having jurisdiction, shall be provided by the Contractor. All traffic control devices for highways and roadways shall comply with the Manual on Uniform Traffic Control Devices (MUTCD).
- B. If rock is encountered, no blasting shall be allowed. Existing pipelines and other existing infrastructure are to be protected. The Contractor shall verify location and elevation of any existing pipelines and other existing infrastructure before proceeding with the construction so as to avoid damage to the existing pipelines or other existing infrastructure during construction. Verification of location and depths of existing pipelines and other existing infrastructure shall be the complete responsibility of the Contractor.

1.06 OPTIONS

- A. Casing Material: Unless specified otherwise, the Contractor may use steel pipe or tunnel liner plate where tunnel or trenchless construction is required for installation of carrier pipe. The material specifications for casing pipe and tunnel liner plate herein are the minimum acceptable requirements. The Contractor shall be fully responsible to ensure the materials used are of sufficient strength for the installation method chosen and the soil conditions that are actually encountered.
- B. Tunnel and Trenchless Methods: Unless specified otherwise, the Contractor may use auger boring, a jacking shield, or hand tunneling for the installation method of casing material. The Contractor shall be fully responsible to ensure the methods used are adequate for the protection of workers and the public.

1.07 DEFINITIONS

- A. Auger Boring: A technique for forming a bore from a jacking shaft to a receiving shaft by means of a rotating auger, which may include cutting tools. Casing pipe is jacked forward sequentially in a cyclic process while the auger is turning. Spoils are removed back to the jacking shaft by helically wound auger flights rotating inside the casing pipe. The equipment may have limited guidance and steering capability.
- B. Casing Pipe: A casing pipe is a pipe used to support a tunnel or trenchless excavation and subsequent installation of a carrier pipe.
- C. Jacking Shaft: An excavation from which tunnel or trenchless equipment is launched for the installation of a pipeline or conduit.
- D. Jacking Shield: A jacking shield is a fabricated steel cylinder where excavation is carried out either by machine or by hand while support, such as tunnel liner plates are installed. The shield may have limited guidance and steering capability.
- E. Pipe Jacking: Pipe jacking is a system of using hydraulic jacks from a jacking shaft to directly install pipes behind a jacking shield so that they form a continuous string of pipe in the ground.

2.00 PRODUCTS

2.01 MATERIALS

- A. Casing Insulators or Spacers:
 - 1. Casing insulators or spacers shall be specifically designed to adequately support and electrically isolate the carrier pipe within the casing pipe under all conditions. Insulators or spacers shall consist of pre-manufactured steel bands with plastic lining and plastic runners. Insulators shall fit snug over the carrier pipe and position the carrier pipe approximately in the center of the casing pipe, to provide adequate clearance between the carrier pipe bell and the casing pipe. Fasteners for insulators shall be stainless steel or cadmium plated. The number and location of casing insulators or spacers shall be determined by the manufacturer to protect carrier pipe from damage.
 - 2. Manufacturers of casing insulators or spacers shall be:
 - a. Advance Products & Systems, LLC (<http://www.apsonline.com>).
 - b. Cascade Waterworks Manufacturing Company (<http://www.cascademfg.com>).
 - c. CCI Piping Systems (<http://www.ccipipe.com>).
 - d. Approved equal.
- B. End Seals:
 - 1. End seals shall be specifically designed to seal the annular space between the casing pipe and the carrier pipe at the ends of the casing pipe.
 - 2. Manufacturers of end seals shall be:
 - a. Advance Products & Systems, LLC (<http://www.apsonline.com>).
 - b. Cascade Waterworks Manufacturing Company (<http://www.cascademfg.com>).

- c. CCI Piping Systems (<http://www.ccipipe.com>).
 - d. Approved equal.
- C. Casing Pipe: Casing pipe shall be welded steel pipe or press-fit steel pipe. Contractor shall be fully responsible for the design of the steel casing pipe, including joints, that meet or exceeds all of the requirements presented herein. Design of the casing pipe shall be performed by a licensed professional engineer licensed in the state where the Project is located as required herein.
1. Welded steel casing pipe shall have a minimum yield strength of 35,000 psi and shall conform to the requirements of ASTM A139/A139M, AWWA C200, and AWWA M11. Pipe joints of welded steel pipe shall be full butt welded in accordance with the casing pipe manufacturer's recommendations and with AWWA C206, as applicable.
 2. Press-fit steel casing pipe shall conform to the requirements of ASTM A36/A36M and A572/A572M, Grade 42. Proprietary Permalok T-5 joints or similar shall be used.
 3. Minimum wall thickness of steel casing pipe shall be as indicated below, as otherwise indicated in the applicable standards referenced herein, or as otherwise required by the authority having jurisdiction, and shall be considered the minimum thickness acceptable. The wall thickness of the steel casing pipe shall be increased as necessary by the Contractor to obtain the adequate strength, stiffness, buckling strength, resistance to deflection, and be able to accommodate the maximum allowable jacking load. The casing pipe shall be designed as to not allow deflection of more than 3 percent.

Nominal Diameter of Steel Casing Pipe (Inches)	Minimum Wall Thickness of Steel Casing Pipe (Inches)	
	Roadway/Highway Crossing	Railway Crossing
14 to 20	0.188	0.250

- D. Tunnel Liner Plates:
1. Tunnel liner plates shall be fabricated from a single piece of metal and flanged on each side, each piece shall contain a grout port, and shall conform to the requirements of ASTM A1011/A1011M, with a minimum tensile strength of 42,000 psi, and a minimum yield strength of 28,000 psi. Tunnel liner plates and associated bolts and nuts shall be hot-dip galvanized.
 2. Contractor shall be fully responsible for the design of the tunnel liner plates. Design of the tunnel liner plates shall be performed by a professional engineer licensed in the state where the project is located as required herein.
 3. Plates shall be of uniform fabrication and those intended for one size tunnel shall be interchangeable. Welding of tunnel liner plate shall not be allowed.
 4. The material used for the construction of the tunnel liner plates shall be new, unused, and suitable for the purpose intended.
 5. Manufacturer of tunnel liner plates shall be:
 - a. Contech Engineered Solutions LLC (<https://www.conteches.com>).
 - b. DSI Tunneling LLC (<http://www.dsitunneling.com>).

- c. Jennmar Corporation (<https://www.jennmar.com>).
 - d. Approved equal.
6. Minimum thickness of tunnel liner plates shall be as calculated in AASHTO Standard Specifications for Highway Bridges, latest edition and/or as indicated in AREMA Manual for Railway Engineering, or indicated in other applicable standards referenced herein, or as otherwise required by the authority having jurisdiction, and shall be considered the minimum thickness acceptable. The thickness of the tunnel liner plates shall be increased as necessary to obtain the adequate strength, stiffness, buckling strength, resistance to deflection and be able to accommodate the maximum allowable jacking load, as applicable. The tunnel liner plate shall be designed as to not allow deflection of more than 3 percent.

2.02 GROUT MIXES

- A. Contact grout shall consist of cement, water, and fluidizers as required to produce a satisfactory pumpable grout with a minimum compressive strength of 500 psi at 28 days.
- B. Backfill grout shall be either structural grout or cellular concrete.
 - 1. Structural grout shall consist of a mixture of sand, cement, and water with a minimum compressive strength of 4000 psi at 28 days. Admixtures may be used to control set times and prevent washout of the cement paste.
 - 2. Cellular concrete shall consist of a mixture of cement, water, and a foaming agent with a minimum compressive strength of 150 psi at 7 days and 250 psi at 28 days. Cellular concrete shall have a minimum wet density of 50 pcf, unless water is present inside the casing, where a minimum wet density of 65 pcf shall be required. The foaming agent shall conform to ASTM C869 and shall be tested in accordance with ASTM C796. No aggregate or fillers shall be used. No admixtures shall be without specific written approval from the foaming agent manufacturer.
- C. Cement used in the grout mixes shall conform to ASTM C150, Type II.
- D. Water used in the grout mixes shall conform to ASTM C94.

3.00 EXECUTION

3.01 GENERAL CONSTRUCTION PROCEDURES

- A. Contractor shall comply with all applicable requirements of permits as described or referenced herein, whether or not such permits were obtained by the Contractor.

3.02 JACKING AND RECEIVING PITS

- A. Excavation and backfill of jacking and receiving pits shall be performed in accordance with 31.23.33 "Trenching and Backfill" and Section 31.23.36 "Trench Safety" and as required by standards referenced herein.
- B. Contractor shall not perform excavation activities beyond the limits shown on the Drawings.
- C. Contractor shall keep the jacking and receiving pits free from standing water to the extent practical and shall perform dewatering as necessary.

- D. Upon completion of the Work described herein, Contractor shall restore the Site as required by the Contract Documents.

3.03 TUNNEL OR TRENCHLESS EXCAVATION

- A. Contractor shall commence excavation operations from the low or downstream end of the tunnel or trenchless crossing, unless otherwise specified.
- B. Contractor shall perform Work in a manner that minimizes ground settlement or heave.
- C. Contractor shall furnish all equipment and all necessary temporary electrical power and water service to perform the Work described herein.
- D. Auger boring or jacking shield equipment shall be manufactured by a company that specializes in the design and fabrication of this type of equipment and has at least 5 years of experience in the design and fabrication of such equipment. The equipment shall meet the following minimum requirements:
 - 1. Capable of installing casing pipe or tunnel liner plate at the diameters and lengths required by the Drawings.
 - 2. Provide a means for controlling line and grade within the tolerances listed herein.
 - 3. Capable of maintaining settlement or heave of the ground to limits as required herein or as otherwise acceptable to the authority having jurisdiction.
 - 4. Hydraulically operated and capable of installing casing pipe or tunnel liner plate in a controlled manner.
 - 5. Capable of providing sufficient torque and jacking loads as appropriate.
- E. For auger boring equipment, the auger shall only extend a maximum of 3 inches beyond the leading edge of the casing pipe to avoid ground loss. If non-cohesive or unstable conditions are encountered, the end of the auger and cutting tools, if used, shall be retracted into the casing a distance of at least three times the diameter of the casing to create a soil plug at the end of the casing to prevent ground movement. The diameter of the auger and cutter tools shall not be greater than the outside diameter of the casing pipe.
- F. Excavated materials shall be removed from the tunnel or trenchless excavation to the jacking pit and shall be disposed of properly at an off-site facility.

3.04 INSTALLATION OF CASING PIPE BY AUGER BORING OR A JACKING SHIELD

- A. Casing pipe to be installed by tunnel or trenchless methods as described herein shall meet the requirements for the type of casing pipe specified herein and shall be in accordance with the Contractor's accepted submittals.
- B. Contractor shall monitor the volume of material excavated and adjust rate of excavation to prevent settlement or heave of the ground.
- C. Casing pipe shall be set on properly braced and supported guide rails in the jacking shaft prior to installation.
- D. Contractor shall not exceed the maximum allowable jacking force when jacking the pipe.
- E. Jointing and welding of the casing pipe shall be performed in accordance with the casing pipe manufacturer's recommendations.

- F. Provide a means of tracking the leading edge of the casing pipe using an electronic transmitting and receiving device.
- G. In the event a section of casing pipe is damaged during installation, the additional casing pipe shall be advanced through the receiving pit to allow for the removal of the damaged casing pipe. This shall be performed at no additional cost to the Owner.

3.05 INSTALLATION OF TUNNEL LINER PLATE WITH A JACKING SHIELD OR HAND TUNNELING

- A. Tunnel liner plate to be installed by tunnel or trenchless methods as described herein shall meet the requirements for the type of tunnel liner plate specified herein and shall be in accordance with the Contractor's accepted submittals.
- B. Assembly of the tunnel liner plate shall be performed in accordance with the tunnel liner plate manufacturer's recommendations. Assemble steel liner plates into circumferential rings. Liner plates shall be of the type to permit segments to be installed completely from inside the tunnel or trenchless crossing.
- C. Accurately maintain the face of the excavation inside the tunnel so as to allow the absolute minimum of void space outside the liner plate. Maintain a maximum of a 1/2-inch tolerance between the outside of the tunnel liner plate and the surrounding excavation wherever possible. The excavated tunnel diameter shall not be greater than 2 inches larger than the tunnel liner plate outside diameter.
- D. Tunnel liner plate installation shall proceed as closely as possible behind the face of the excavation. The face of the excavation shall at no time be more than 6 inches ahead of the required space to install an individual tunnel liner plate. Use breast plates, poling boards, or other suitable devices to maintain accurate excavation with the minimum of unsupported excavation at any time. Tunnel liner plates shall not be allowed to deflect vertically during installation.
- E. Contractor shall not exceed the maximum allowable jacking force when advancing the jacking shield against the tunnel liner plate, if used.
- F. In the event tunnel liner plate(s) are damaged during installation or jacking operations, the damaged tunnel liner plate(s) shall be removed and replaced. This shall be performed at no additional cost to the Owner.
- G. Remove fittings and plug grout ports and fittings after completion of contact grouting.

3.06 CONTROL OF LINE AND GRADE

- A. Benchmarks and other survey control points shall be established by the Contractor. Accuracy of the benchmarks shall be verified prior to commencement of construction by the Contractor.
- B. The casing pipe or tunnel liner plate shall be installed to meet the following tolerances along the entire length of the tunnel or trenchless crossing. If the installation exceeds the specified tolerances herein, Contractor shall perform corrective work that is acceptable to the Engineer and at no additional cost to the Owner.
 - 1. Horizontal Tolerance: Plus or minus 6 inches from theoretical horizontal alignment for every 100 feet of tunnel or trenchless crossing, unless otherwise specified.

2. Vertical Tolerance: Plus or minus 2 inches from theoretical vertical alignment for every 100 feet of tunnel or trenchless crossing, unless otherwise specified.

3.07 INSTALLATION OF CARRIER PIPE

- A. Carrier pipe to be installed within the casing pipe or tunnel liner plates shall meet the requirements for the type of carrier pipe as specified. Where indicated, place, align, and anchor casing insulators or spacers inside the casing pipe.
- B. Pull or skid pipe into place inside the casing pipe or tunnel liner plate. Lubricants such as flax soap or drilling mud may be used to ease pipe installation. Contractor shall not use petroleum products, such as oil or grease for this purpose.
- C. Perform all required testing and surveying of the carrier pipe prior to performing backfill grouting.

3.08 BACKFILL GROUTING

- A. The annular space between the casing pipe and the carrier pipe shall be completely backfilled throughout the entire length from the low (downstream) end of the pipeline crossing. Seal the low end and place backfill grout until grout is extruded from the opposite end.
- B. The carrier pipe and any other piping or conduits whether temporary or permanent shall be firmly anchored or blocked in place, while maintaining required clearances, to prevent floatation or movement during backfilling operations.
- C. After backfill grouting is completed, seal or plug the ends of the casing pipe with End Seals as required herein.

END OF SECTION

33 10 13 **DISINFECTING OF WATER UTILITY DISTRIBUTION**

1.00 GENERAL

1.01 WORK INCLUDED

- A. Disinfect the facilities for pumping, storing, or conveying potable water to comply with the standards for potable water of the regulatory agency of jurisdiction. Potable water is defined as any water that has been filtered, disinfected or otherwise treated to the meet regulatory standards (in the water treatment plant this includes the inside surfaces of the filters).
- B. Disinfect piping systems that are used to convey water, solutions, or chemicals to the potable water facilities.
- C. Test water from the disinfected system per regulatory standards to verify that water is acceptable. Repeat procedure if tests do not meet standards.

1.02 STANDARDS

- A. The Applicable provisions of the following standards apply as written here in their entirety:
 - 1. American Water Works Association (AWWA) Standards:

AWWA B300	Hypochlorites
AWWA B301	Liquid Chlorine
AWWA C651	Disinfecting Water Mains
AWWA C652	Disinfection of Storage Facilities
AWWA C653	Disinfection of Water Treatment Plants

- 2. NSF International (NSF) / American National Standards Institute (ANSI) Standards:

NSF/ANSI Standard 60	Drinking Water Treatment Chemicals – Health Effects
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1.03 QUALITY ASSURANCE

- A. Demonstrate that :
 - 1. Disinfection Chemicals are in compliance with AWWA B300 or AWWA B301 and AWWA C651, AWWA C652 or AWWA C653.
 - 2. Disinfection Chemicals are in compliance with NSF/ANSI Standard 60.

1.04 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 “Document Management” and shall include:
 - 1. Shop Drawings: Manufacturer’s data sheet demonstrating compliance with appropriate AWWA/NSF/ANSI Standards for materials not listed in the approved manufacturers list in Part 2.00 - Materials Article.

2. Record Data: Materials to be used from the approved manufacturers listed in Part 2.00 – Materials Article.

2.00 PRODUCTS

2.01 MATERIALS

- A. Liquid Chlorine: Meeting the requirements of AWWA B301 and NSF/ANSI Standard 60 certified for use in potable water systems.
- B. Calcium or Sodium Hypochlorite: Meeting the requirements of AWWA B300 and NSF/ANSI Standard 60 Certified for use in potable water systems.
- C. Calcium hypochlorite intended for use in swimming pools will not be accepted (AWWA C651 Item 4.1.3).
- D. Approved Manufacturers:
 1. AllChem Performance - Chlor Mor Cal Shock.
 2. Arch Chemicals - Dry Tec Granular.
 3. Brentag Southwest Inc. - Sodium Hypochlorite, 12.5%.
 4. Alliance Chemical - Sodium Hypochlorite, 10-15%.
 5. Olin Corporation - Sodium Hydrochlorite Solution.
 6. Approved equal.

3.00 EXECUTION

3.01 NEW FACILITIES

- A. New facilities shall be thoroughly disinfected in accordance with AWWA C651 - Disinfecting Water Mains, AWWA C652 - Disinfection of Storage Facilities, and AWWA C653 - Disinfection of Water Treatment Plants, and then flushed and sampled before being placed in service. Samples shall be collected and tested in accordance with the ODEQ Rules and local authority having jurisdiction.
- B. During construction keep basins, pipe, fittings, equipment, and appurtenances free from dirt and debris.
 1. Clean basins thoroughly before disinfection.
 2. Seal the open ends of pipe with water-tight plugs when pipe is not being laid.
 3. Pump water from trenches before removing the plug when water accumulates in the trench.
- C. Complete hydrostatic test of the line prior to disinfection.
- D. Wash the surfaces to be disinfected.
 1. Flush pipelines. The minimum quantity of water used for flushing must exceed the capacity of the line to ensure that clean water has traversed the entire length of pipe.
 2. Power wash the surfaces of basins and reservoirs using high pressure wash systems.

- E. Disinfect facilities per the following procedures of AWWA:
 - 1. Water Mains: AWWA C651 - latest revision.
 - 2. Water Storage Facilities: AWWA C652 - latest revision.
 - 3. Water Treatment Plants: AWWA C653 - latest revision.
- F. Fill the system with potable water. Test the water to see that it meets the requirements of the regulatory agency of jurisdiction for potable water. Monitor the system for 2 days. If water test fails to meet the prescribed standards, repeat the disinfection process until water meets quality standards for disinfection.

3.02 REPAIRS OR CONNECTIONS TO EXISTING LINES

- A. Clean and sterilize the interior surfaces of new piping, fittings, equipment, and appurtenances to be installed in an existing potable water system or connected to an existing system.
- B. Clean and sterilize the existing pipe or facilities for a minimum distance of 3 pipe diameters back from the ends of the pipe. Plug the ends of the line when work is not being performed on the pipe.
- C. Perform sterilization by swabbing each item with a concentrated chlorine solution.
 - 1. Each piece is to be disinfected prior to being assembled for installation in the existing pipe.
 - 2. Disinfect each piece just prior to assembly to help prevent re-contamination.
 - 3. Plug the ends of the assembly until a new item is to be added to the assembly.
 - 4. Store disinfected materials on blocks to prevent contact with the ground.

3.03 DISPOSAL OF FLUSHING AND DISINFECTION WATER

- A. Chlorinated water used in flushing and disinfecting pipelines, storage tanks, or vessels prior to connection to the distribution system shall be disposed of by the Contractor in an acceptable manner. Chlorinated water must be “de-chlorinated” prior to disposal to eliminate adverse impacts to the surrounding environment. Water released to the environment shall meet all AWWA, EPA, and ODEQ regulatory requirements.
 - 1. Residual chlorine concentrations may be reduced using sulfur dioxide, sodium bisulfite, sodium sulfite, sodium thiosulfate, or ascorbic acid.
 - 2. The discharge must be to a splash pad or paved area and may not be located within 300 feet of the intake for a domestic drinking water supply or 500 feet of any public or private water well.
 - 3. An effluent water sample must be taken during the first hour of discharge at a location immediately near the point of discharge, and collected prior to commingling with storm water, wastewater, or other flows.
 - 4. For discharges that extend beyond an hour in duration, a second sample must be taken of the last 10 percent of the effluent.

5. Sampling protocol, sample containers, holding times, preservation methods, and analytical methods must follow the requirements set forth in the general permit.
 6. The effluent grab sample(s) must be analyzed for total residual chlorine by an accredited and certified laboratory.
 7. Any noncompliance that endangers human health or safety, or the environment must be reported to the ODEQ in accordance with the general permit.
 8. Any effluent violation which deviates from the permitted effluent limitation by more than 40 percent must be reported to the ODEQ in accordance with the general permit.
 9. Contractor must record all hydrostatic test water sample results on an approved Discharge Monitoring Report (EPA Form 3320-1). These monitoring records shall be retained for a period of 3 years from the date of the record and be readily available for review by the ODEQ upon request.
- B. With the written permission of the Owner of the system, chlorinated water may be disposed of in a sanitary sewer system if one is available. In the case of larger pipelines and the larger volumes of water involved, the Contractor will not be permitted to use the sanitary sewer system for disposal even if one is available.

END OF SECTION

33 12 19 WATER UTILITY DISTRIBUTION FIRE HYDRANTS

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to install fire hydrant and appurtenances, operators, bolts, nuts and gaskets.

1.02 QUALITY ASSURANCE

- A. Acceptable Manufacturers:
1. American-Darling Mark 73-5.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:
1. Hydrant cut sheets and Certification of Compliance with AWWA C502 as record data.

1.04 STANDARDS

- A. The applicable provisions of the following standards shall apply as if written here in their entirety:

1. American National Standards Institute (ANSI) Standards:

ANSI B16.1	Cast Iron Pipe Flanges and Flanged Fittings
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2. American Society for Testing and Materials (ASTM) Standards:

ASTM A126	Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings
ASTM A307	Carbon Steel Bolts and Studs, 60,000-psi Tensile Strength
ASTM A325	Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength
ASTM A536	Standard Specification for Ductile Iron Castings
ASTM D2000	Classification System for Rubber Products in Automotive Applications

3. American Water Works Association (AWWA) Standards:

AWWA C105	Polyethylene Encasement for Ductile-Iron Pipe System
AWWA C111	Standard for Rubber-Gasket Joints
AWWA C502	Standard for Dry-Barrel Fire Hydrants

4. NSF International

NSF 61	Drinking Water System Components – Health Effects
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2.00 PRODUCTS

2.01 FIRE HYDRANTS

- A. General: Fire hydrants to be installed as shown on the plans or furnished for general installation shall be dry-barrel, traffic model conforming to AWWA Standard for Dry-Barrel Fire Hydrants, AWWA Standard C502.
- B. Fire Hydrants shall have a rated working pressure of 250 psi or greater.
- C. All fire hydrant components in contact with potable water shall conform to the requirements of NSF 61.
- D. Supplementary Details:
 - 1. Type of Shutoff: Compression type with the flow. Valve action shall provide positive shutoff at minimum closing torque. Wedge action closing gates shall not be permitted. Scissor type main valves shall not be permitted unless approved by the Owner's Representative.
 - 2. Inlet Connection: Mechanical joint unless otherwise specified. Inlet connection shall be for a 6-inch cast iron pipe with minimum net valve opening of 5-1/4 inches unless otherwise specified.
 - 3. Delivery Classification: Number and size of pumper and hose nozzles shall be two 2.5 inch hose nozzle connections and one 4.5 inch pumper nozzle connection.
 - 4. Bury Length: Ground to bottom of connection pipe shall be 4 feet, or as specified by the Owner's Representative.
 - 5. Harnessing Lugs: Furnished with the hydrants.
 - 6. Nozzle Cap Gasket: Furnished on all nozzle caps; long life; black rubber; conforming to Rubber Products in Automotive Applications ASTM D2000 or equal.
 - 7. Drain Valve and Outlet: Hydrants shall be equipped with two drain holes and provided with an automatic and positively operating, non-corroding drain or dip valve so as to drain the hydrant completely when the main valve is shut.
 - 8. Direction to Open: Counterclockwise. The number of turns to open shall be in accordance with AWWA C502, Section 4.6.5.2.
 - 9. Operating and Cap Nuts per client preference.
- E. Breakable Type Hydrants: Breakable Or Sleeve Type Couplings: The barrel of the hydrant between the elbow and the top cap shall be made in two parts connected by a swivel flange or breakable flange which shall permit facing of the nozzles in any desired direction in increments of 45 degrees or less. The complete hydrant shall be of such design that when the hydrant barrel is broken through traffic collision or otherwise, it may be replaced without disturbing the bottom of the hydrant.
 - 1. The materials used for gaskets between the upper and lower barrels and the base and nozzle section shall be compounded to conform to ASTM D2000.
 - 2. Provision shall be made in the design of the stem to disconnect the stem from the hydrant parts above the standpipe break point in the event of traffic accidents. If breakable or sleeve type couplings are used, they shall have sufficient torsional strength so that a torsional failure of the stem shall occur at some point other than at the

coupling. Design of the coupling shall be such that when the coupling is broken, no parts shall come loose and fall into the hydrant barrel, and the break shall not occur through the pins or bolts holding the coupling to the stem.

- F. Main Valve Seats: Designed so that incorrect positioning is impossible.
- G. Gaskets - Ground Line: The valve body flange gaskets shall be EPDM or an equal approved by Owner's Representative prior to substitution. They shall be full face or ring type with the lower flange recessed to hold the gasket in place.
- H. Nozzle Cap Chains: In accordance with AWWA C502, Section 4.6.3.2.
- I. Flanges: All flanges other than break flanges shall be equipped with mechanical joints. Gland bolts shall be high-strength, low-alloy, corrosion-resistant steel conforming to ASTM A325, Type 3.
- J. Operating Stems: The spindle of the operating stem and the stem nuts for hydrants having the operating threads located in the barrel or waterway shall be manganese bronze, Everdur or stainless steel. Barrel bolts and nuts shall meet the requirements of ASTM A307, 60,000-psi tensile strength.
- K. All working parts in the waterway, except for sliding stem support mechanisms, shall be bronze-to-bronze or bronze-to-iron.
- L. O-Ring: Hydrant stem packing boxes, where needed, shall be provided with O-ring grooves and sealed with O-rings. O-rings shall be furnished in lieu of stem packing. They shall be of the double O-ring type designed so that the rubber rings shall move against a bronze, stainless steel or other non-corrodible metal surface. O-ring shall be in accordance with ASTM D2000.
- M. Extensions: Fire hydrants shall be designed to accept 6-, 12-, or 18-inch extensions.
- N. Hydrant Heads: Nozzle may be faced in any desired direction.
- O. Upper Stem Thread Lubrication: Upper stem thread lubrication may be accomplished with oil or grease.
 - 1. When oil is used, it shall be in conjunction with a functional oil reservoir and an oil filler port. This lubrication system shall be sealed from the waterway and any external contaminants by use of O-ring seals. The hydrant shall be factory filled with a low viscosity, FDA approved non-toxic oil lubricant which will remain fluid through a temperature range of -60 to 150 F. Means for field check of oil lubrication level shall be provided.
 - 2. When grease is used, the hydrant shall be factory lubricated with food grade grease such as Lubriplate No. 630-AA (medium soft) or equal. Means for field lubrication without disassembly shall be provided.
- P. Finishes:
 - 1. Exterior:
 - a. Above Grade:
 - 1). Furnish exterior coating for above grade Fire Hydrant assembly components in accordance with AWWA C502

- 2). After placement, the outside of the hydrant above the finished ground line shall be thoroughly cleaned and painted with two coats of paint in accordance with Client Standards.
- b. Below Grade: Furnish exterior coating for below grade fire hydrant assemblies in accordance with AWWA C502.
2. Interior: Interior coating for fire hydrant assemblies in accordance with AWWA C502.

3.00 EXECUTION

3.01 INSTALLATION

- A. Install hydrants at the locations shown on the Plans or as directed by the Owner's Representative. Set hydrants truly vertical and securely brace with concrete until self-standing. Surround hydrants with a minimum of 7 cubic feet of washed gravel or stone to allow drain outlets to operate.
- B. Install fire hydrants using special mechanical joint anchoring fittings. Install a flanged by MJ gate valve on the main line tee.
- C. Wrap and protect the gate valve, including bolts at joints, and the bottom of the fire hydrant with polyethylene encasement in accordance with AWWA C105 to prevent direct contact with concrete blocking. At weep holes with filter fabric to prevent dirt and debris from entering the fire hydrant.

3.02 FIELD QUALITY CONTROL

- A. Upon completion of installation of the equipment, conduct an acceptance test to verify the satisfactory operation of each unit. The test shall be conducted in a manner approved by and in the presence of the Owner's Representative. Check the unit for general operation and leakage. The unit shall perform in a manner acceptable to the Owner's Representative before final acceptance is made by the Owner.

3.03 SCHEDULES

- A. Paint the fire hydrants to conform to the Owner's color coding.

END OF SECTION

33 31 13.16 HDPE PIPING

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment and incidentals necessary to install polyethylene pipe, and complete installation in accordance with the Contract Documents. The finished pipe shall be continuous over the entire length of the sewer between manholes and be free from defects.

1.02 QUALITY ASSURANCE

- A. Polyethylene pipe jointing shall be performed by personnel trained in the use of the thermal butt-fusion equipment and recommended methods for new pipe connections. Personnel directly involved with installing the new pipe shall have received training in the proper methods for handling and installing the polyethylene pipe. Training shall be performed by a qualified representative of the pipe manufacturer. The Contractor shall maintain records of trained personnel, and shall certify that training was received not more than 12 months before commencing construction.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:
1. Shop Drawings, catalog data, and manufacturer's technical data showing complete information on material composition, color, physical properties, and dimensions of new pipe and fittings. Include manufacturer's recommendation for handling, storage, and repair of pipe and fittings.

1.04 STANDARDS

- A. Comply with local governing regulations if more stringent than specified herein. Piping shall meet the following standards and shall be a part of this Section as if written here in their entirety.
1. ASTM International (ASTM) Standards:

ASTM F1473	Test Method for Notch Tensile Test to Measure the Resistance to Slow Crack Growth of Polyethylene Pipes and Resins
ASTM D2122	Determining Dimensions of Thermoplastic Pipe and Fittings
ASTM F2620	Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings
ASTM D2837	Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials
ASTM D3035	Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter (up to 3-Inch IPS)
ASTM D3350	Specification for Polyethylene Plastics Pipe and Fittings Material
ASTM F714	Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter (4-Inch IPS and larger)

2. American Water Works Association (AWWA) Standards:

AWWA C906	Polyethylene (PE) Pressure Pipe and Fittings, 4 through 64 Inches, for Water Distribution
AWWA M55	Polyethylene (PE) Pipe Design and Installation

- B. Domestic water piping shall be approved by the Underwriters Laboratory and shall be accepted by the State Fire Insurance Commission for use in water distribution systems. HDPE water pipe shall bear the seal of approval (or “NSF” mark) of the National Sanitation Foundation Testing Laboratory for potable water pipe.

1.05 DELIVERY, STORAGE, AND HANDLING OF MATERIALS

- A. Transport, handle, and store pipe and fittings as recommended by manufacturer.
B. If new pipe and fittings become damaged before or during installation, it shall be repaired as recommended by the manufacturer or replaced as required by the Owner’s Project Representative at the Contractor’s expense, before proceeding further.
C. Deliver, store, and handle other materials as required to prevent damage.

2.00 PRODUCTS

2.01 MATERIALS

- A. Pipe: Polyethylene Plastic Pipe shall be high density polyethylene pipe (HDPE) 4710.
1. Solid wall high density polyethylene for pressure water pipe shall meet the requirements of AWWA C906 “Polyethylene (PE) Pressure Pipe and Fittings, 4 through 64 Inches, for Water Distribution” (Ductile Iron Pipe Sizing).
- B. All pipe shall be made of virgin material. No rework except that obtained from the manufacturer’s own production of the same formulation shall be used.
1. The pipe shall be homogenous throughout and shall be free of visible cracks, holes, foreign material, blisters, or other deleterious faults.
 2. Dimension Ratios: The minimum wall thickness of the polyethylene pipe shall meet the following:
 - a. Pressure Applications: AWWA C906 DR-11 Pressure Class 200 psi
- C. Polyethylene Fittings: The polyethylene fittings shall be manufactured from a polyethylene compound which conforms to ASTM D3350 cell class PE445574C or E material. Fittings shall be manufactured by the same manufacturer as the pipe.
1. Pipe fittings shall have a long-term hydrostatic strength rating of 1600 psi or more at 23 degrees Celsius, in accordance with ASTM D2837.
 2. Environmental stress crack resistance (ESCR) of the material shall meet the requirements as specified in ASTM D3350 Cell Classification of 7 for a 500-hour PENT material using ASTM F1473 (PENT).
- D. Select Material: Selected or processed excavated trench material shall be Class 10 Aggregate Fill in accordance with Section 31 05 16 “Aggregates for Earthwork.”

- E. Meter Box: City of Shawnee preferred meter box is East Jordan with knockouts and blue lids.

2.02 MATERIALS TEST

- A. Tests for compliance with this Section shall be made as specified herein and in accordance with the applicable ASTM Specification. A certificate of compliance with ISO 9000 shall be furnished, by the manufacturer for all material furnished under this Section. Polyethylene plastic pipe and fittings may be rejected for failure to meet any of the requirements of this Section.

3.00 EXECUTION

3.01 HANDLING

- A. The joints shall be handled near the middle with wide web slings and spreader bars, no chains allowed. Rope slings also work well with straight lengths. The use of chains, end hooks or cable slings that may scar the pipe are not permitted. The following procedures shall be observed when handling HDPE pipe.
 - 1. Always stack the heaviest series of pipe at the bottom.
 - 2. Protect the pipe from sharp edges when overhanging the bed of a truck or trailer by placing a smooth, rounded protecting strip on the edge of the bed.
 - 3. The load should be anchored securely to prevent slippage.
- B. Lengths of small-diameter, lightweight pipe can be unloaded manually.
- C. Pipe applications shall normally be handled by:
 - 1. Unloading the pipe from the truck in a row along the side of the installation area and moving the fusion unit along the row of joints.
 - 2. Stacking the pipe beside the fusion unit and trailing the pipe out after fusion, then dragging the long length of pipe into place for installation. It is suggested that as the pipe is fused and moved through the fusion machine, additional joints of pipe should be placed in the moveable jaw side of the machine for each subsequent fusion. This prevents the hydraulic system of the machine from having to pull the previously fused long length.
- D. Dragging the pipe into place is permitted provided the pipe isn't damaged from sharp rocks or excessive abrasion created by pulling the pipe great distances.

3.02 STORAGE

- A. If the pipe must be stacked for storage, avoid excessive stacking heights. Out-of-roundness can be created in the lower rows of pipe, due to excessive stacking heights. The limitation on storage height is 8 rows for pipe 6 inches or less, 3 rows for pipe 8 inches or less, 2 rows for pipe 32 inches or less and 1 row for pipe 63 inches or less.
- B. Care shall be taken to ensure that the pipe is stacked in straight rows. The expansion and contraction caused by uneven heating by the sunlight shall be prevented by restraining the racks.

- C. Pipe laid directly on the ground shall be placed on an area free of loose stones or sharp objects. Scarring or gouging of the pipe shall be avoided.

3.03 PIPE JOINING

- A. The polyethylene pipe shall be assembled and joined at the Site using the thermal butt-fusion method to provide a leak proof joint. Threaded or solvent-cement joints and connections are not permitted. All equipment and procedures used shall be in strict compliance with the manufacturer's recommendations. Fusing shall be accomplished by personnel certified as fusion technicians by a manufacturer of polyethylene pipe and/or fusing equipment.
- B. The butt-fused joint shall be in true alignment and shall have uniform roll-back beads resulting from the use of proper temperature and pressure. The ends of the joints shall be cleaned prior to fusion. The joint shall be allowed adequate cooling time before removal of pressure. When cool, all weld beads shall then be removed from both the inside and outside surface such that the joint surfaces shall be smooth. The fused joint shall be watertight and shall have a tensile strength equal to that of the pipe. All joints shall be subject to acceptance by the Owner's Project Representative. All defective joints shall be cut out and replaced at no cost to the Owner. Any section of the pipe with a gash, blister, abrasion, nick, scar or other deleterious fault greater in depth than 10 percent of the wall thickness, shall not be used and must be removed from the Site. However, a defective area of the pipe may be cut out and the joint fused in accordance with the procedures stated above. In addition, any section of pipe having other defects such as concentrated ridges, discoloration, excessive spot roughness, pitting, variable wall thickness or any other defect of manufacturing or handling as determined by the Owner's Project Representative shall be discarded and not used.

3.04 BENDING PIPE

- A. HDPE may be cold-bent to a minimum radius of 25 times the pipe diameter as it is installed, eliminating the need in many cases for elbows for slight bends. The minimum bending radius that can be applied to the pipe without kinking varies with the diameter and wall thickness of the pipe. Contractor shall conform to manufacturer's recommendations. If adequate space is not available for the required radius, a fitting of the desired angle shall be fused into the piping system to obtain the necessary change in direction.

3.05 INSTALLATION BELOW GROUND

- A. Pipe Laying:
 - 1. When pulling pipe, either a pulling head or a suitable wraparound sleeve with rubber protective cover shall be used to prevent the pulling cables from damaging the pipe. The pipe shall not be pulled by the flanged end.
 - 2. Open cut installations shall be in accordance with Section 31 23 33 "Trenching and Backfill."
- B. Grouting (Continuous or at Manholes): Pipe running through a manhole wall shall be anchored by attaching a collar or side fused branch saddles to the pipe and encasing them in the wall of the manhole.

3.06 SERVICE CONNECTIONS

- A. Make service connections in accordance with AWWA Manual M55 "Design and Installation of PE Pipe" and the instructions from the Manufacturer.
- B. All new service connections are to be made to the existing meter with a new meter box. The Contractor is responsible for reinstalling the antennas to new meter boxes.

3.07 FIELD QUALITY CONTROL

- A. Hydrostatic Testing for pressure piping systems shall be performed in accordance with ASTM F2164. Testing pressure shall not exceed 1.5 times the system design pressure and total testing time including the time required to pressurize, stabilize, hold test pressure, and depressurize should not exceed 8 hours. If 5 psi is lost during testing pipeline must be re-pressurized.
- B. HDPE pipe deflection shall not exceed deflection percentages identified in ASTM F1962 or manufacturer's maximum allowable deflection, whichever is lower. Allowable pipe deflection varies based on DR rating. The following maximum deflection percentages can be used for the following DR ratings: DR21 – 7.5 percent, DR17 – 6.0 percent, DR15.5 – 6.0 percent, DR13.5 – 6.0 percent, DR11 – 5.0 percent, DR9 – 4.0 percent, DR7.3 – 3.0 percent. Deflection measurements can be taken by mandrel or by measurement of inside diameter before and after backfill operations.
- C. Do not enclose or cover any Work until inspected.

3.08 CLEAN AND ADJUST

- A. Remove surplus pipeline materials, tools, rubbish and temporary structures and leave the construction site clean, to the satisfaction of the Owner's Project Representative.

END OF SECTION

Division 40
Process Integration

40 05 61 GATE VALVES

1.00 GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment, and incidentals necessary to install gate valves and appurtenances, including valve boxes, operators, bolts, nuts, and gaskets.

1.02 QUALITY ASSURANCE

- A. The intent of these specifications is to purchase a quality product of the manufacturer's latest design, meeting the minimum standards set forth.
- B. The services of the manufacturer's technical representative shall be provided for pre-startup installation checks, startup assistance, training of Owner's operating personnel, troubleshooting and other services as required in Section 01 75 00 "Starting and Adjusting."
- C. Experience Requirements: The manufacturer shall have at least 10 years of experience in the manufacture of valves used in the water and wastewater treatment environment. References and installation list shall be provided on request.
- D. Acceptable Manufacturers:
 - 1. American Flow Control.
 - 2. M&H.
 - 3. Mueller.
 - 4. Clow.
 - 5. U.S. Pipe.
 - 6. Kennedy Valve.

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Document Management" and shall include:
 - 1. Shop Drawings.
 - 2. Operation and Maintenance Manuals.

1.04 STANDARDS

- A. The applicable provisions of the following standards shall apply as if written here in their entirety:
 - 1. American Society of Mechanical Engineers (ASME) Standards:

ASME B16.1	Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250
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 - 2. ASTM International (ASTM) Standards:

ASTM A126	Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings
ASTM A536	Standard Specification for Ductile Iron Castings

3. American Water Works Association (AWWA) Standards:

AWWA C111/A21.11	Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
AWWA C500	Metal-Seated Gate Valves for Water Supply Service
AWWA C509	Resilient Seated Gate Valves for Water Supply Service
AWWA C515	Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service
AWWA C550	Protective Interior Coatings for Valves and Hydrants

1.05 GUARANTEE AND WARRANTY

- A. Manufacturer shall warrant the equipment and materials furnished under this Section against defects in materials and workmanship and operational failure for a period of 1 years from the date of Owner acceptance.
- B. In the event of failure of any part or parts of the equipment during the first (1) one year of service, provided that the equipment has been operated and maintained in accordance with good practice, the manufacturer shall furnish, deliver, and install a replacement for the defective part or parts at the manufacturer's own expense. Manufacturer is also responsible for equipment removal, reinstallation, and freight.

2.00 PRODUCTS

2.01 GATE VALVES

- A. General:
 1. Gate valves 3 inches through 36 inches shall be resilient wedge type with non-rising stem in strict accordance with AWWA C509/C515. Valves 16 inches and larger shall be provided with gearing to reduce the maximum required opening and closing torque to 80 ft-lb.
 2. Gate valves smaller than 3 inches shall be bronze, non-rising stem with wedge disc and screwed ends for 300-psi W.O.G. working pressure. Bronze gate valves shall be Crane No. 636E or approved equal.
 3. Gate valves 30 inches and larger shall be equipped with non-rising stem and with spur-gears in enclosed oil or grease lubricated gear cases. Gear boxes shall be factory lubricated. Flanges shall conform to ANSI, Class 125 or 250.
- B. Gate: Gate for double disc valves shall be ductile iron with bronze mounted wedges and seats. Gate for resilient seated valves shall be ductile iron with rubber-seat compound bonded to the valve gate.
- C. Manual Operators: Operators shall turn counterclockwise to open the valve. Exposed valves shall have handwheel operators unless otherwise designated. A directional arrow

and the word "open" shall be cast on the handwheel. Valves for buried service shall have a 2-inch square nut operator and shall be installed with extension stems where required to extend operating nut to within 12 inches of the finished grade. Provide a cast iron valve box to enclose the operating stem. Valve box shall be three-piece extension type equal to Mueller No. 10380 or Clow F2450.

- D. Stem and Seal: The non-rising stem shall be bronze or stainless steel with inside screw. Shaft seal shall employ O-rings or V-type packing.
- E. Bell Ends: Where designated, valves shall be mechanical joint or rubber gasketed push on joints in accordance with the applicable requirements of AWWA C111/A21.11.

2.02 TAPPING SLEEVES AND VALVE ASSEMBLY

- A. Tapping sleeves shall have a ductile iron body, mechanical joint, with a Class 125 flanged outlet. All sleeves and valves shall be ductile iron and have a minimum of 150 psi working pressure. All taps shall be machine drilled; no burned taps will be allowed. Furnish Mueller, American Flow Control, Kennedy, or equal.
- B. Tapping valves shall be AWWA C515 resilient seat gate valves with a Class 125 flange inlet with a mechanical joint outlet. Furnish American Flow Control Series 2500, Mueller T-2360 or equal.

2.03 PROTECTIVE COATINGS AND LININGS

- A. The exterior surfaces of all exposed valves shall be furnished with a factory applied rust-inhibitive primer. Primer shall be coordinated with field painting to ensure compatibility.
- B. The valve manufacturer's standard paint will be acceptable provided it is functionally equivalent to the specified paint and is in accordance with the field painting specified in Section 09 96 00.01 "High-Performance Coatings."
- C. Provide factory coatings and linings per AWWA C550.

3.00 EXECUTION

3.01 INSTALLATION

- A. Carefully handle and lower buried valves into position to prevent damage to any part of the valves. Place the valve in the proper position with stem truly vertical and securely hold until connections have been made. Furnish bolts, nuts, and gaskets. Contractor shall be responsible for adjusting the valve boxes to the proper length to conform with the ground surface.

3.02 BLOCKING UNDER GATE VALVE

- A. Gate valves 18 inches and larger which are buried shall rest on a concrete pad. Pad shall extend for the full width of the trench and from back of hub to back of hub (or flange). Care shall be taken to not interfere with the jointing. Concrete shall be minimum 1500-psi compressive strength.

3.03 FIELD QUALITY CONTROL

- A. Upon completion of installation of the equipment, an acceptance test to verify the satisfactory operation of each unit shall be conducted. The test shall be conducted in a manner approved by and in the presence of the Engineer. The unit shall be checked for general operation and leakage. The unit must perform in a manner acceptable to the Engineer before final acceptance will be made by the Owner.

3.04 SCHEDULES

- A. Equipment shall be supplied in accordance with the following schedule: The required equipment and certain pertinent data are given below. This list is given to facilitate description of the various equipment and as an aid to plan take-off and is not guaranteed to be complete.

Location	Valve ID	Size (In.)	Type	End Connect.	Process Fluid	Max. Diff. Pressure (psi)	Operator Type	Installation (Buried/ Exposed)	Service
MIDLAND WL STA 0+00		8		F				Buried	O/C
MIDLAND WL STA 3+63		8		F				Buried	O/C
MIDLAND WL STA 3+63		8		F				Buried	O/C
MIDLAND WL STA 9+49		8		F				Buried	O/C
MIDLAND WL STA 10+23		8		F				Buried	O/C

Type: MS = Metal Seated, RS = Resilient Seated

End Connection: F = Flange, MJ = Mechanical Joint, PJ = Push-on Joint

Service: O/C = Open/Close, T = Throttling, M = Modulating

END OF SECTION

**CITY OF SHAWNEE/PUBLIC WORKS DEPARTMENT
REQUEST FOR BIDS
N. Midland Addition Water Line Replacement**

Notice is hereby given that the City of Shawnee (Owner) will receive sealed bids at the Shawnee City Hall, 16 W. 9th St. until **2:00 p.m.** on the **14th** day of **January** 2025, for **N. Midland Addition Water Line Replacement** Project. Bids will be publicly opened and read aloud at Shawnee City Hall Annex Conference Room at 2:00 p.m. Bids received after 2:00 p.m. will not be considered. Bidders are invited to be present when the bids are opened. Minority and small business owners are encouraged to submit bids. Project will be awarded on January 21st, 2025, at city council meeting.

Bid documents and copies of specifications may be obtained at <https://construction.freese.com>. A **MANDATORY** pre-bid conference will be held in the Shawnee City Commission Chambers, Shawnee, Oklahoma on **January 7th, 2025**, at **2:00 p.m.** Bids submitted by firms not represented at the Pre-Bid Meeting will be returned unopened and will not be considered.

A cashier's check or a certified check on a solvent bank in Oklahoma or a proposal bond in the amount of five percent (5%) of the bid shall accompany the bid of each proposer. The check or bond shall be made payable to the Owner. All checks or bonds will be returned to unsuccessful proposers. This check or bond shall be as a guarantee of contractor's ability to perform the contract bid upon, and that he will enter into a written contract with the Owner to perform said work and/or furnish said materials in accordance with said specifications and furnish the required bonds within ten (10) business days after the acceptance of his bid. No proposer may withdraw his bid for a period of sixty (60) days after the closing date for the receipt of bids.

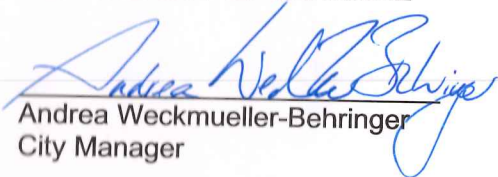
Bid, Performance, Maintenance and Statutory Payment Bonds in the amount of 100% of the contract price each with a Corporate Surety licensed in Oklahoma and approved by the Owner will be required for the faithful performance of the contractor for projects **over fifty thousand dollars (\$50,000.00)**, and the bidder shall state in the bid the name and address of the Surety or Sureties who will sign this bond in case the contract is awarded to him. Copies of acceptable bond forms are included in this packet.

A Maintenance Bond guaranteeing the repair of all damage due to improper materials or workmanship for a period of one (1) year after the acceptance of the work by the Owner will be required.

Questions concerning this project should be addressed to the Engineering Department at (405) 878-1506.

The Owner reserves the right to reject any and all bids, to waive irregularities in any bid and award a contract to the proposer who, in the opinion of the Owner, offers a bid which appears to be in the best interest of the Owner.

FOR THE CITY OF SHAWNEE


Andrea Weckmueller-Behringer
City Manager

Plan Holder's List			
CITY OF SHAWNEE - Midland Waterline Project			
	Name of Company	Contact Info (Phone and Email)	Representative Name
1	Circle B Underground	918.367.8881 ddeane@cbcok.com	Audrey Beavers
2	Mach Energy	580.747.8136 hhernandez@machenergyllc.com	Holton Hernandez
3	NPL	918.998.2708 dbrown@gonpl.com	Derrick Brown
4	Davenport Construction	405.760.3922 dgucon@cox.net	Greg Davenport
5	Sagemill Construction	918.810.4071 rance@sagemill.net	Rance Miller
6	MK Excavation	405.334.1177 angus@mkexcavationllc.com	Angus Macintyre
7	Marsau	580.541.2620 chp2620@hotmail.com	Chuck Postiep
8	Downey Construction	405.625.2988 bids@downeycontracting.com	David Vaughan
9	Bruce Johnson Construction	405.902.8998 zach@brucejohnson.construction	Zach Stuglis
10	B&H Construction	405.650.4319 red@bboring.com	Red Schulze
11	Timco	405.882.0650 alinn@timco-services.com	Aftahn Linn

Project	<u>N. Midland Addition Water Line Replacement</u>	Project Number	
Owner	<u>City of Shawnee, Oklahoma</u>		<u>ARP-23-0015-DPG</u>

Project Description
 Replacement of approximately 1,100 feet of 2-inch and 4-inch water line to 8" HDPE and related appurtenances in the same corridors that runs along Scott Street and N. Minnesota Ave.

Date Proposals Received 1-14-25 Proposal Tabulation Attached? ☒ Yes ☐ No

Recommended Offeror NPL Construction

Recommended Amount of Contract Award \$ 387,265.45 Engineer's Estimate \$ 804,455

Contract Price within Available Funds? ☒ Yes ☐ No Funding Source OWRB ARPA Program

Proposed Project Completion Date 120 Days from NTP

Contract Times meet Owner's Schedule? ☒ Yes ☐ No

Comments

The City of Shawnee received nine bids for the referenced project on Tuesday, January 14th. A copy of the bid tabulation is attached for reference. The project is intended to be funded through the American Rescue Act (ARPA) program, with a total loan amount of \$9,533,946.24. The following is a summary of the bids received:

<u>Contractor</u>	<u>Base Bid Total</u>
1) NPL Construction	\$ 387,265.45
2) Downey Contracting LLC	\$ 428,793.00
3) Mach Energy Services LLC	\$ 488,434.50
4) MK Excavation LLC	\$ 498,450.25
5) Timco Services	\$ 499,134.25
6) Circle B Underground	\$ 505,333.00
7) B&H Construction LLC	\$ 506,791.00
8) Marsau Enterprises	\$ 640,433.00
9) Davenport Construction Inc	\$ 712,804.00

Based on NPL Construction's bid and qualifications, we recommend awarding the referenced contract to NPL Construction. NPL submitted the Bid Form, Acknowledgement of Receipt of Addenda, Non-Collusion Affidavit, Business Relationship Affidavit, Equal Opportunity Clause, Non-Segregated Facilities Certification, and Bid Bond.

Review of the Bids received indicates that the offer of the Recommended Contractor provides the best value to the Owner. A review of the Recommended Contractor's Statement of Qualifications and a check of the references provided indicates that the Recommended Contractor meets the qualification requirements specified in the Contract Documents and that Recommended Contractor's previous experience on similar projects has been acceptable. It is recommended that the Project be awarded to the Recommended Contractor in the amount of the Recommended Amount of Contract Award.

Recommended by	<u>Jonathan Faughtenberry</u>	Date	<u>1-15-25</u>
Title	<u>Project Manager</u>		
Representing	<u>Freese & Nichols, Inc.</u>		

Attachment A - Detailed Tabulation of Bids Received

Project Owner Construction Manager Design Professional	N. Midland Addition Water Line Replacement		Project Number		MACH ENERGY SERVICES LLC			CIRCLE B UNDERGROUND			TIMCO SERVICES		
	City of Shawnee, OK		SWN24262										
	Jonathan Faughtenberry												
	Freese and Nichols												
Item No.	Description	Quantity	Units	Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note	
Items in Base Offer (excluding Allowances) per Section 01 29 01 Measurment and Basis for Payment													
A-01	8" HDPE (DIPS) WATER LINE, DR 11 BY OPEN CUT	650	LF	185.00	120,250.00		88.00	57,200.00		287.00	186,550.00		
A-02	14" STEEL CASING BY TRENCHLESS	400	LF	260.00	104,000.00		344.00	137,600.00		312.50	125,000.00		
A-03	8" GATE VALVE, AWWA	3	EA	3,500.00	10,500.00		4,308.00	12,924.00		2,750.00	8,250.00		
A-04	8"X8" TAPPING SLEEVE AND VALVE	2	EA	6,500.00	13,000.00		8,457.00	16,914.00		3,200.00	6,400.00		
A-05	8"X6" TEE	2	EA	1,000.00	2,000.00		1,678.00	3,356.00		1,500.00	3,000.00		
A-06	8" 90° BEND	1	EA	1,000.00	1,000.00		1,348.00	1,348.00		1,500.00	1,500.00		
A-07	8" 45° BEND	2	EA	1,000.00	2,000.00		1,285.00	2,570.00		1,500.00	3,000.00		
A-08	FIRE HYDRANT ASSEMBLY, INC. ISOLATION VALVE	2	EA	7,500.00	15,000.00		8,915.00	17,830.00		4,500.00	9,000.00		
A-09	NEW LONG SIDE WATER SERVICE BY TRENCHLESS	5	EA	2,500.00	12,500.00		2,456.00	12,280.00		2,980.00	14,900.00		
A-10	NEW SPECIALTY WATER SERVICE	10	EA	3,000.00	30,000.00		3,573.00	35,730.00		1,450.00	14,500.00		
A-11	LEAD SERVICE LINE REMOVAL AND DISPOSAL	1	EA	5,000.00	5,000.00		2,675.00	2,675.00		6,500.00	6,500.00		
A-12	BLOCK SODDING	1,283	SY	16.50	21,169.50		6.00	7,698.00		12.75	16,358.25		
A-13	CLEARING AND GRUBBING	1	LS	15,000.00	15,000.00		6,420.00	6,420.00		5,000.00	5,000.00		
A-14	HYDROSTATIC TESTING AND DISINFECTION	1	LS	6,500.00	6,500.00		3,745.00	3,745.00		2,500.00	2,500.00		
A-15	PREPARE AND IMPLEMENT SWPPP	1	LS	2,500.00	2,500.00		3,210.00	3,210.00		1,250.00	1,250.00		
A-16	TRAFFIC CONTROL	1	LS	8,000.00	8,000.00		9,095.00	9,095.00		5,000.00	5,000.00		
A-17	PROJECT SIGN	1	EA	1,500.00	1,500.00		4,280.00	4,280.00		1,500.00	1,500.00		
A-18	CUT AND PLUG EXISTING WATER LINE	3	EA	1,200.00	3,600.00		1,739.00	5,217.00		5,800.00	17,400.00		
A-19	CELLULAR CONCRETE FILL ABANDONED LINES	4	CY	2,000.00	8,000.00		816.00	3,264.00		500.00	2,000.00		
A-20	CONCRETE PAVEMENT REPAIR	94	SY	180.00	16,920.00		300.00	28,200.00		110.00	10,340.00		
A-21	CONCRETE DRIVEWAY REPAIR	187	SY	180.00	33,660.00		289.00	54,043.00		118.00	22,066.00		
A-22	ASPHALT PAVEMENT REPAIR	77	SY	185.00	14,245.00		278.00	21,406.00		170.00	13,090.00		
A-23	GRAVEL DRIVEWAY REPAIR	33	SY	115.00	3,795.00		96.00	3,168.00		110.00	3,630.00		
A-24	8" CORRUGATED METAL CULVERT REPLACEMENT	70	LF	118.50	8,295.00		44.00	3,080.00		120.00	8,400.00		
A-25	MOBILIZATION	1	LS	25,000.00	25,000.00		47,080.00	47,080.00		7,000.00	7,000.00		
B-1	LANDSCAPING RESTORATION	1	LS	5,000.00	5,000.00		5,000.00	5,000.00		5,000.00	5,000.00		
A	BASE BID				\$ 488,434.50	1		\$ 505,333.00			\$ 499,134.25		
General Notes				Offeror Notes:			Offeror Notes:			Offeror Notes:			
1				1. Total from Contractor is not correct, they show items A-01 through A-25 is 468,434.50 and is actually 483,434.50.									
2													
3													
4													
5													
6													
7													
8													
9													
10													

NPL CONSTRUCTION			B&H CONSTRUCTION LLC			MARSAU ENTERPRISES			DOWNEY CONTRACTING			DAVENPORT CONSTRUCTION			MK EXCAVATION LLC		
Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note	Unit Cost	Extended Amount	Note
57.87	37,615.50		85.00	55,250.00		53.00	34,450.00		93.00	60,450.00		135.00	87,750.00		125.00	81,250.00	
359.51	143,804.00		309.00	123,600.00		750.00	300,000.00		302.00	120,800.00		430.00	172,000.00		365.00	146,000.00	
980.55	2,941.65		4,300.00	12,900.00		2,955.00	8,865.00		2,700.00	8,100.00		3,800.00	11,400.00		3,500.00	10,500.00	
6,497.44	12,994.88		9,200.00	18,400.00		7,900.00	15,800.00		4,500.00	9,000.00		5,500.00	11,000.00		10,000.00	20,000.00	
519.00	1,038.00		2,600.00	5,200.00		2,955.00	5,910.00		1,535.00	3,070.00		1,900.00	3,800.00		950.00	1,900.00	
347.04	347.04		2,100.00	2,100.00		2,501.00	2,501.00		1,351.00	1,351.00		1,900.00	1,900.00		750.00	750.00	
347.04	694.08		2,000.00	4,000.00		2,506.00	5,012.00		1,290.00	2,580.00		1,900.00	3,800.00		750.00	1,500.00	
5,517.19	11,034.38		8,400.00	16,800.00		7,010.00	14,020.00		10,931.00	21,862.00		8,800.00	17,600.00		7,500.00	15,000.00	
1,949.25	9,746.25		4,300.00	21,500.00		3,000.00	15,000.00		2,534.00	12,670.00		3,500.00	17,500.00		2,500.00	12,500.00	
1,123.52	11,235.20		3,100.00	31,000.00		4,500.00	45,000.00		3,313.00	33,130.00		15,000.00	150,000.00		1,200.00	12,000.00	
2,000.00	2,000.00		6,500.00	6,500.00		4,500.00	4,500.00		3,285.00	3,285.00		1,500.00	1,500.00		2,500.00	2,500.00	
23.01	29,521.83	2	7.00	8,981.00		10.00	12,830.00		4.00	5,132.00		8.00	10,264.00		6.75	8,660.25	
5,937.00	5,937.00		8,000.00	8,000.00		10,000.00	10,000.00		2,850.00	2,850.00		30,000.00	30,000.00		15,000.00	15,000.00	
5,889.35	5,889.35		5,600.00	5,600.00		3,500.00	3,500.00		11,027.00	11,027.00		5,800.00	5,800.00		9,500.00	9,500.00	
2,076.10	2,076.10		8,500.00	8,500.00		1,800.00	1,800.00		6,179.00	6,179.00		3,500.00	3,500.00		5,000.00	5,000.00	
16,000.00	16,000.00		16,500.00	16,500.00		3,000.00	3,000.00		27,000.00	27,000.00		15,000.00	15,000.00		19,500.00	19,500.00	
2,600.00	2,600.00		3,500.00	3,500.00		750.00	750.00		579.00	579.00		2,500.00	2,500.00		2,500.00	2,500.00	
6,165.88	18,497.64		1,200.00	3,600.00		1,200.00	3,600.00		1,287.00	3,861.00		2,500.00	7,500.00		5,500.00	16,500.00	
1,342.30	5,369.20		450.00	1,800.00		350.00	1,400.00		5,287.00	21,148.00		600.00	2,400.00		1,200.00	4,800.00	
174.60	16,412.40		360.00	33,840.00		350.00	32,900.00		127.00	11,938.00		350.00	32,900.00		110.00	10,340.00	
136.24	25,476.88		315.00	58,905.00		300.00	56,100.00		82.00	15,334.00		350.00	65,450.00		110.00	20,570.00	
89.56	6,896.12		325.00	25,025.00		350.00	26,950.00		198.00	15,246.00		350.00	26,950.00		75.00	5,775.00	
83.54	2,756.82		80.00	2,640.00		125.00	4,125.00		167.00	5,511.00		30.00	990.00		35.00	1,155.00	
16.57	1,159.90		95.00	6,650.00		106.00	7,420.00		27.00	1,890.00		90.00	6,300.00		75.00	5,250.00	
10,221.23	10,221.23		21,000.00	21,000.00		20,000.00	20,000.00		19,800.00	19,800.00		20,000.00	20,000.00		65,000.00	65,000.00	
5,000.00	5,000.00		5,000.00	5,000.00		5,000.00	5,000.00		5,000.00	5,000.00		5,000.00	5,000.00		5,000.00	5,000.00	
	\$ 387,265.45			\$ 506,791.00			\$ 640,433.00			\$ 428,793.00			\$ 712,804.00			\$ 498,450.25	

Offeror Notes:	Offeror Notes:	Offeror Notes:	Offeror Notes:	Offeror Notes:	Offeror Notes:
2. Line item A-12 total is shown from contractor as \$29,498.82. The actual total is \$29,521.83 which changes the overall total. Contractor multiplied by a quantity of 1,282, supposed to be 1,283.					



Finance Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: January 21, 2025
To: City Commission
From: Kimberly Smith, Finance Director
Subject: January 2025 Sales and Use Tax Deposit

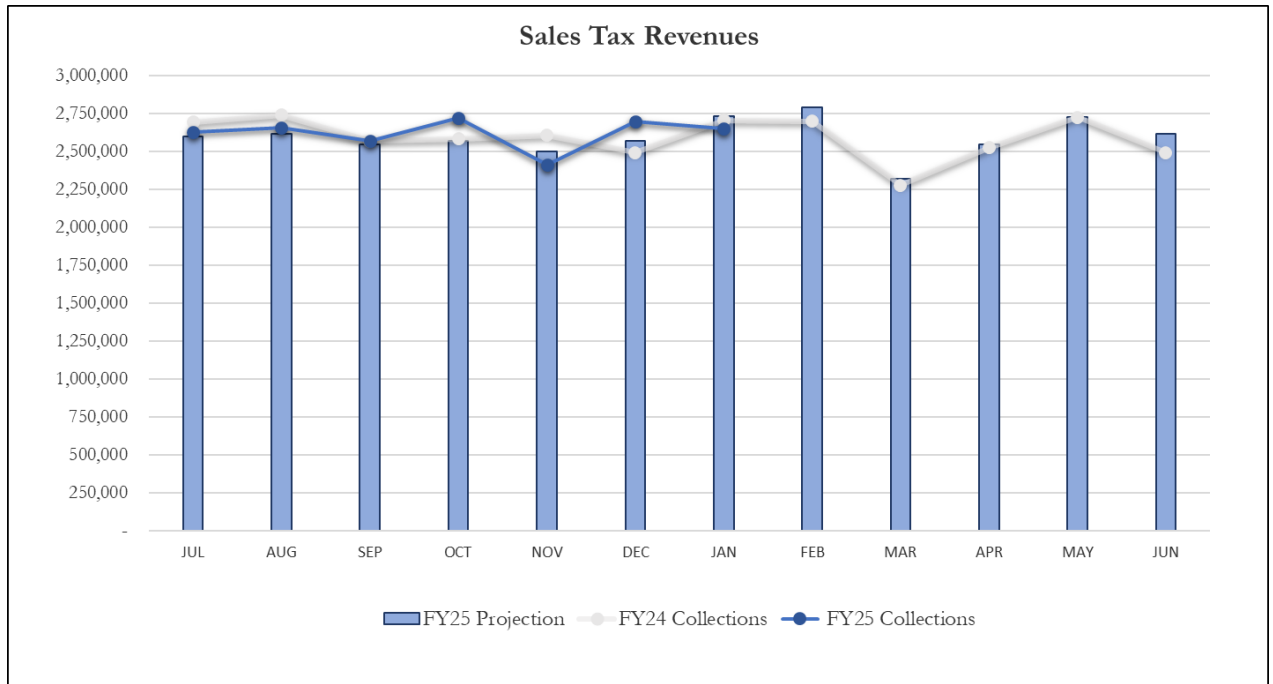
Background: The Oklahoma Tax Commission (the “OTC”) collects and enforces collection of sales and use taxes, including special earmarked taxes such as alcohol and tobacco, for the entities responsible for remitting taxes to the City of Shawnee. Entities with monthly tax liabilities exceeding \$2,500 are required to remit tax estimates each month by the 20th; in addition, entities are required to report their final tax collections for the previous month along with a final payment of taxes for the previous month on the 20th. To summarize, tax collections remitted to the City of Shawnee by the OTC in January consist of December estimates and November final reported collections. Any taxes collected for months prior to November will include accrued late penalties and interest.

- Sales Tax Collection Allocated by Fund - The January sales tax deposit was \$2,652,182.60 including interest of \$3,877.21, to be allocated as follows:

<u>Fund</u>	<u>Allocation</u>
General Fund	\$ 1,326,091.30
2018 Capital Improvements Fund	331,522.83
Capital Improvements Fund	256,930.19
Street Improvements Fund	290,082.47
Economic Development Fund	33,152.28
Police Sales Tax Fund	41,440.35
Fire Sales Tax Fund	41,440.35
2023 Capital Improvements Fund	331,522.83
Total Sales Taxes Collected	<u><u>\$ 2,652,182.60</u></u>

- Finance Department Report - Sales and use tax collections totaled \$3,096,646.24 for January 2025. Sales tax projections are based on an average for the most recent three years of sales tax history. For the year, sales tax collections are up \$198,470 or 1.10%, over the projected budget year-to-date, across 8 funds. Use tax collections are down \$142,350 or 5.05% below the projected budget year-to-date.

○ Fiscal Year 2025 Sales Tax Collections and Performance:

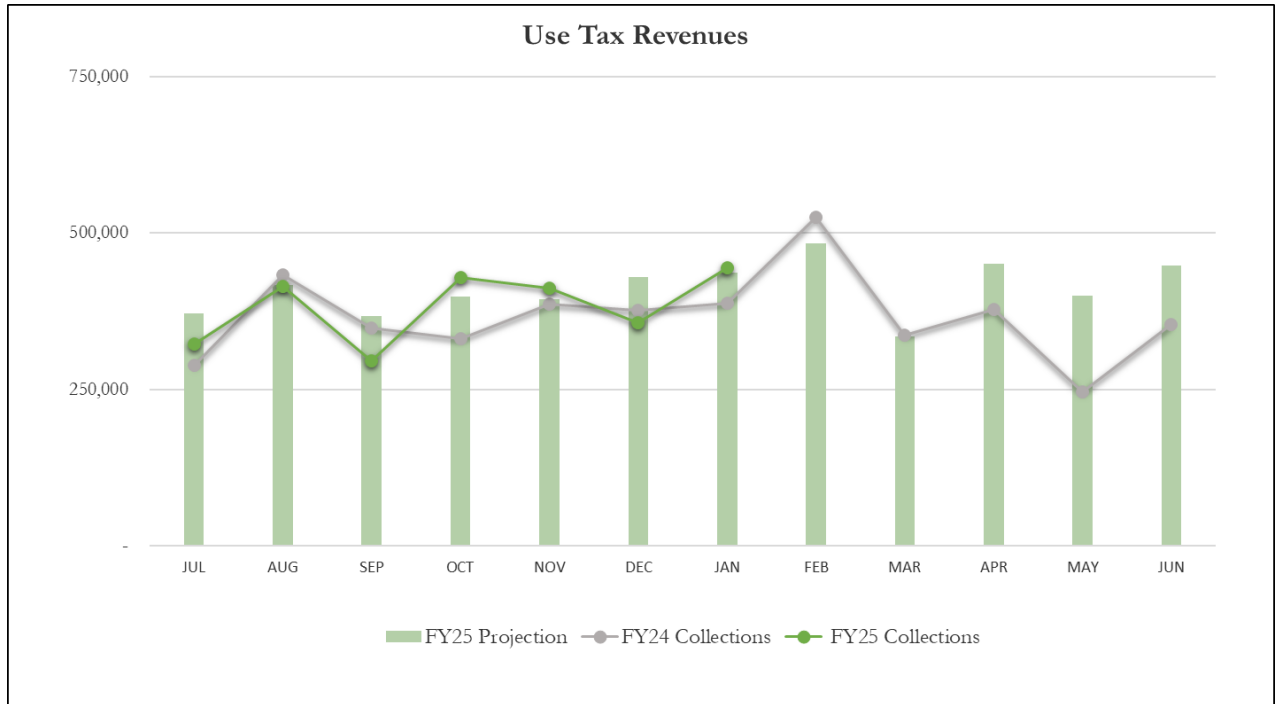


	Projected Budget	Actual	Amount Variance	Percentage Variance
Sales Tax Receipts - January 2025	\$ 2,729,092	\$ 2,652,183	\$ (76,909)	-2.82%
Sales Tax Receipts (year-to-date):	\$ 18,122,986	\$ 18,321,456	\$ 198,470	1.10%

	January 2024	January 2025	Amount Variance	Percentage Variance
Sales Tax Receipts (vs Prior Year):	\$ 2,705,137	\$ 2,652,183	\$ (52,955)	-1.96%

	Year To Date FY 2024	Year To Date FY 2025	Amount Variance	Percentage Variance
Sales Tax Receipts (vs Prior Year):	\$ 18,385,538	\$ 18,321,456	\$ (64,081)	-0.35%

○ Fiscal Year 2025 Use Tax Collections and Performance:



	Projected Budget	Actual	Amount Variance	Percentage Variance
Use Tax Receipts - January 2025	\$ 437,427	\$ 444,464	\$ 7,037	1.61%
Use Tax Receipts (year-to-date):	\$ 2,816,746	\$ 2,674,396	\$ (142,350)	-5.05%

	January 2024	January 2025	Amount Variance	Percentage Variance
Use Tax Receipts (vs Prior Year):	\$ 387,950	\$ 444,464	\$ 56,514	14.57%

	Year To Date FY 2024	Year To Date FY 2025	Amount Variance	Percentage Variance
Use Tax Receipts (vs Prior Year):	\$ 2,550,999	\$ 2,674,396	\$ 123,397	4.84%

- Fiscal Year 2025 – General Fund Sales & Use Tax – Below Projections:

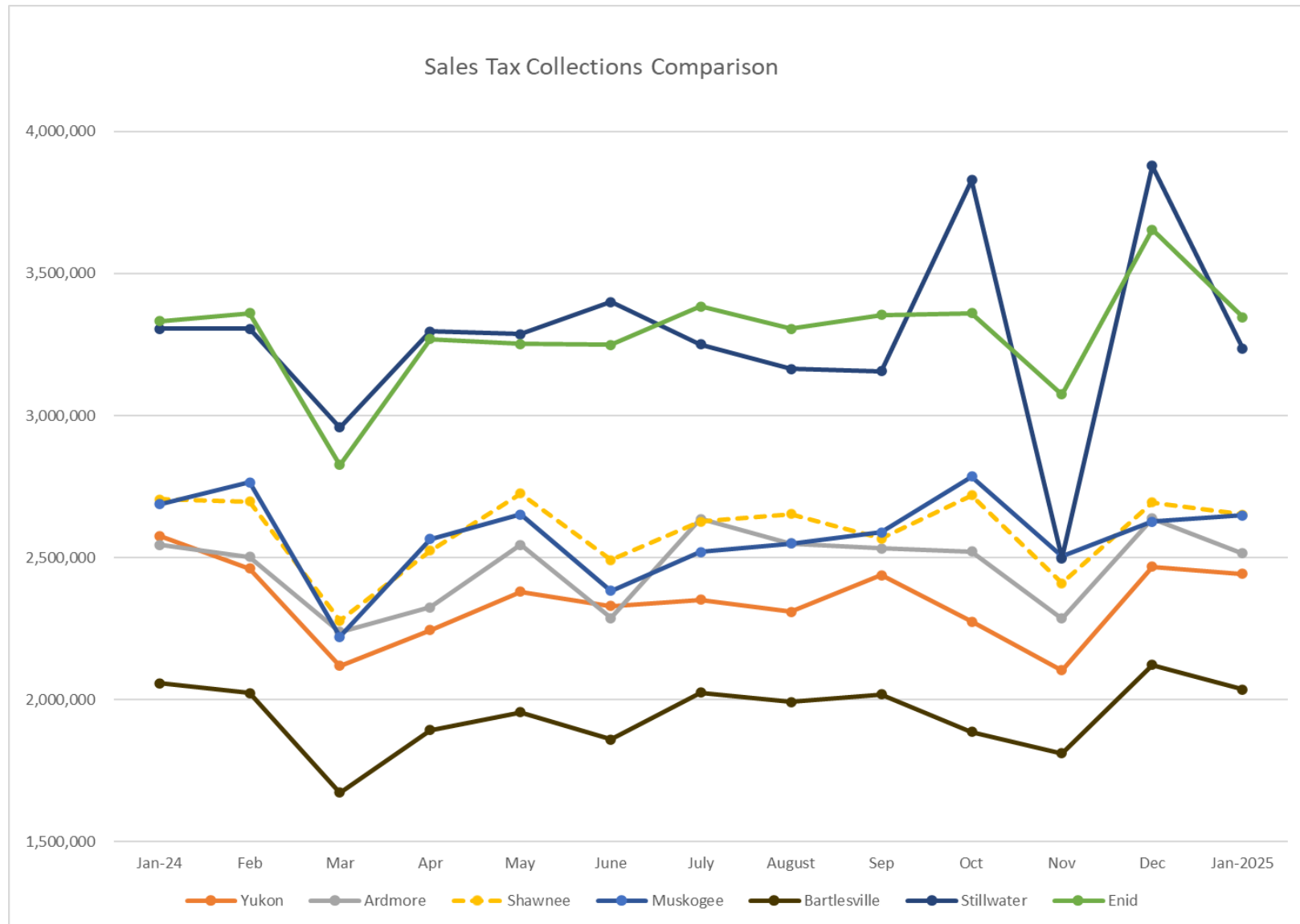
General Fund Projections (year-to-date)

Sales Tax Above/(Below) Projections:	\$	99,235
Use Tax Above/(Below) Projections:	\$	(142,350)

Appropriated:

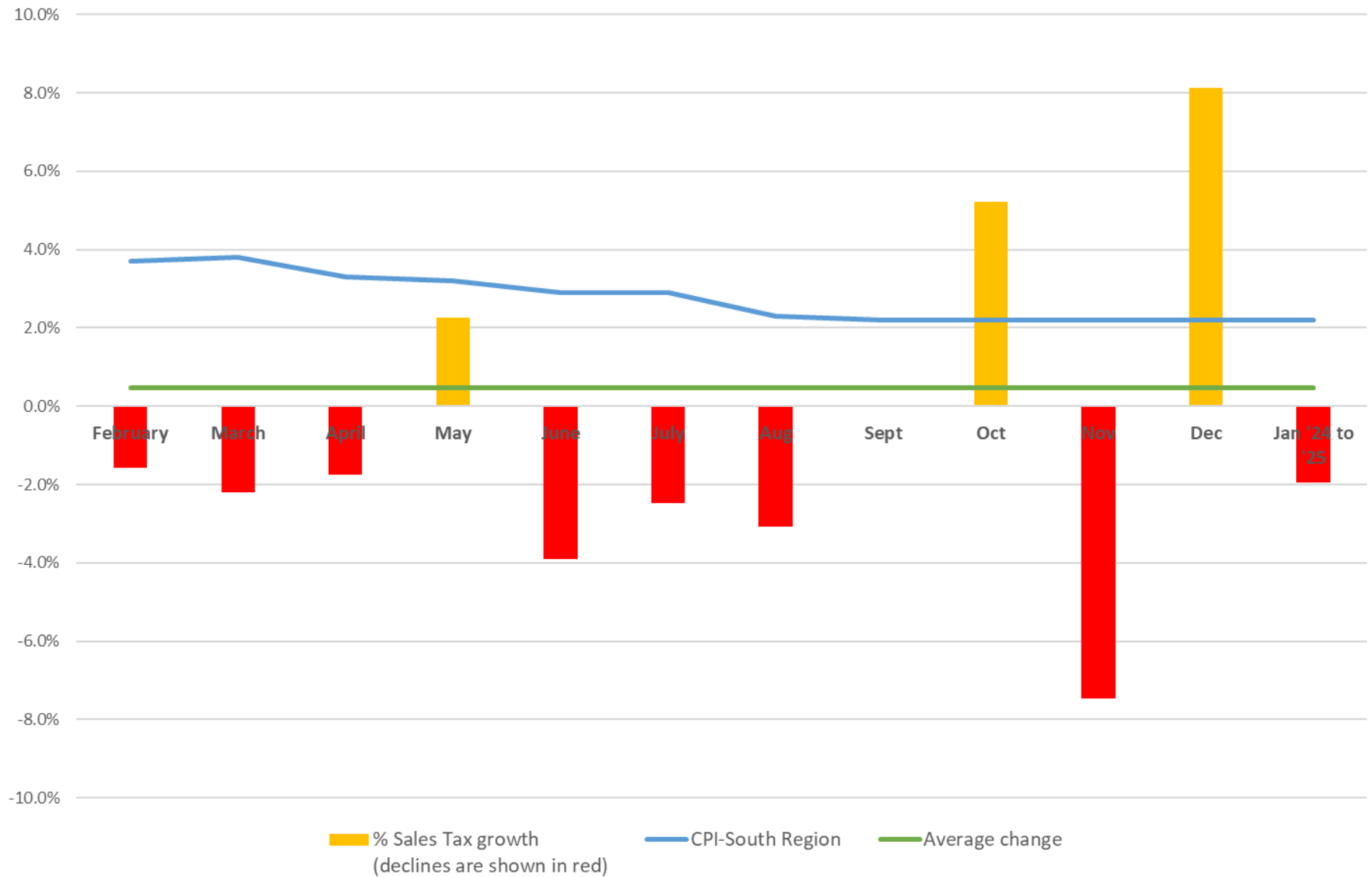
Total Appropriated	\$	-
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Total Unappropriated:	\$	(43,115)
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	Yukon	Ardmore	Shawnee	Muskogee	Bartlesville	Stillwater	Enid
Population	23,630	24,725	31,377	36,878	37,290	48,394	51,308
City Tax Rate	4.00%	3.75%	4.00%	4.00%	3.40%	3.63%	4.25%
State Rank by Total Collections (Prior Year)	14	13	15	12	16	11	10

Year over Year Sales Tax Growth by Month



How to Navigate the City of Shawnee's Online Budget to Actuals

This year, the City of Shawnee implemented OpenGov which allows for an interactive experience with the city's budget. The Budget to Actuals report is laid out in four sections: Revenue vs Expenditure Summary YTD, Revenue by Source, Breakdown by Account Group, and Breakdown by Department.

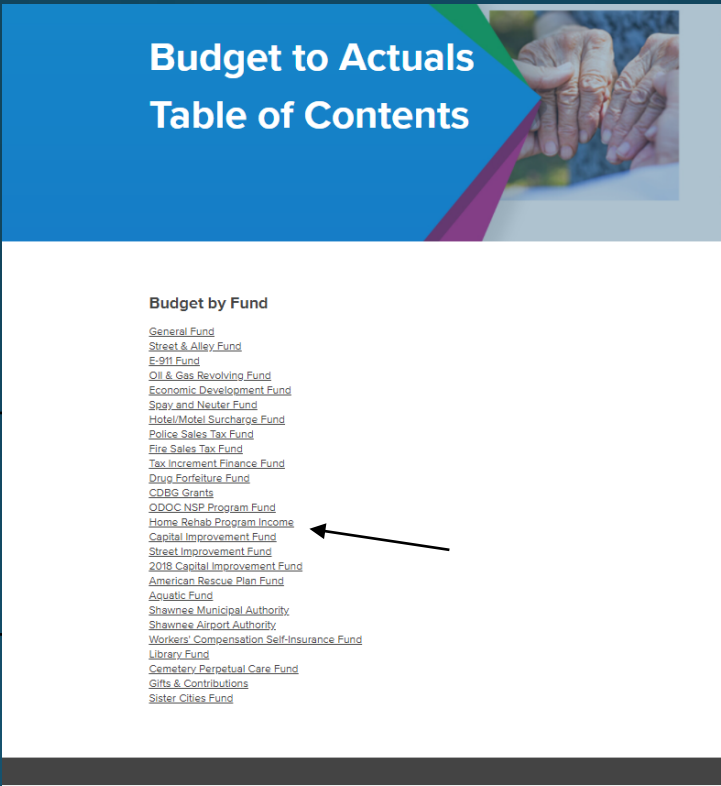
Please Note: *OpenGov works best with Google Chrome.*

Table of Contents

The link below will take you to the City of Shawnee Online Budget to Actuals.

<https://stories.opengov.com/shawneeok/published/u84NCy36R>

The first thing which appears is the Table of Contents. This page contains links to each fund. You may look at the desired budget by clicking on the hyperlink.

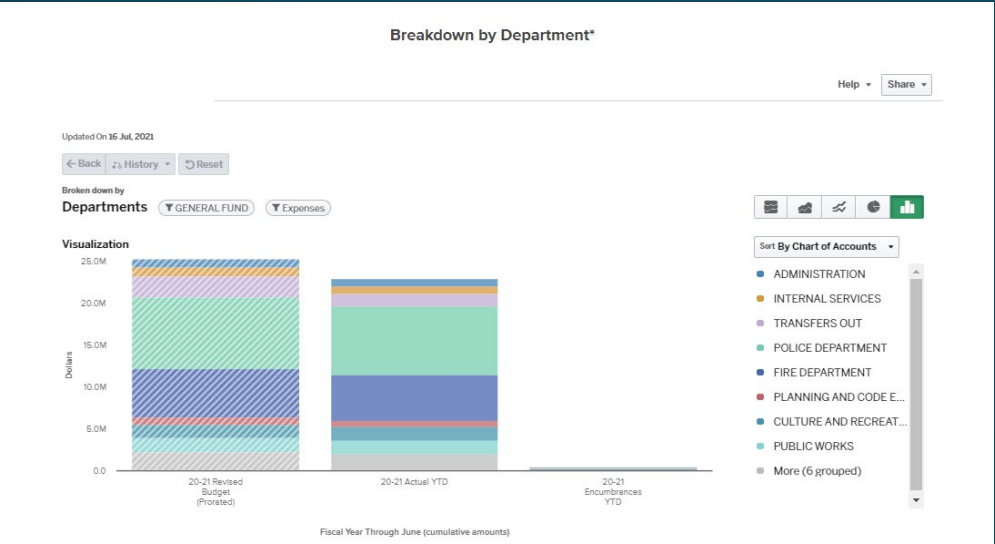


OpenGov comes with many features. The next two pages outline some of the basics of clicking through an OpenGov budget to actuals page.

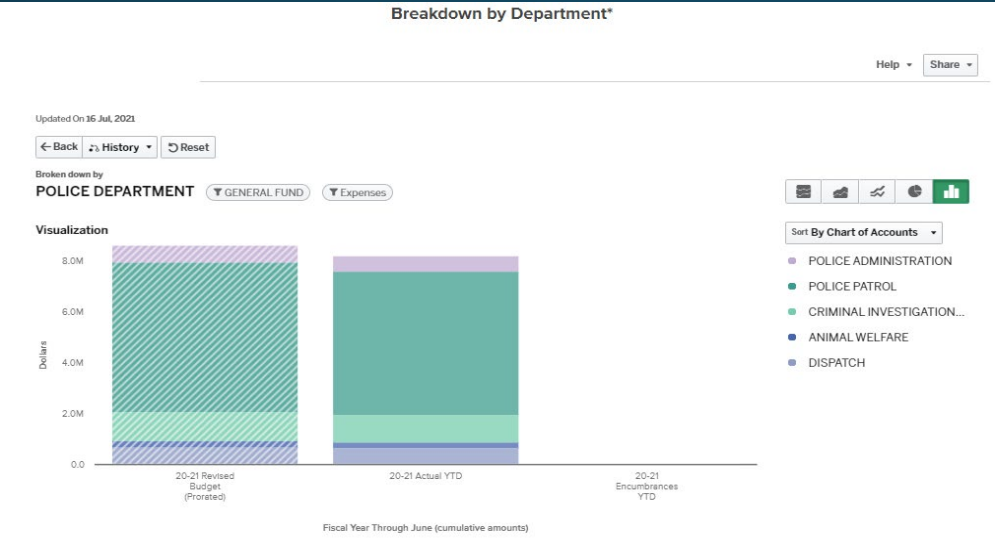
Drill-Down Capabilities

Certain graphs are dynamic and can be used to drill-down. For example, the General Fund Breakdown by Department can be limited to certain divisions. This is done by clicking on the portion of the graph which is of interest.

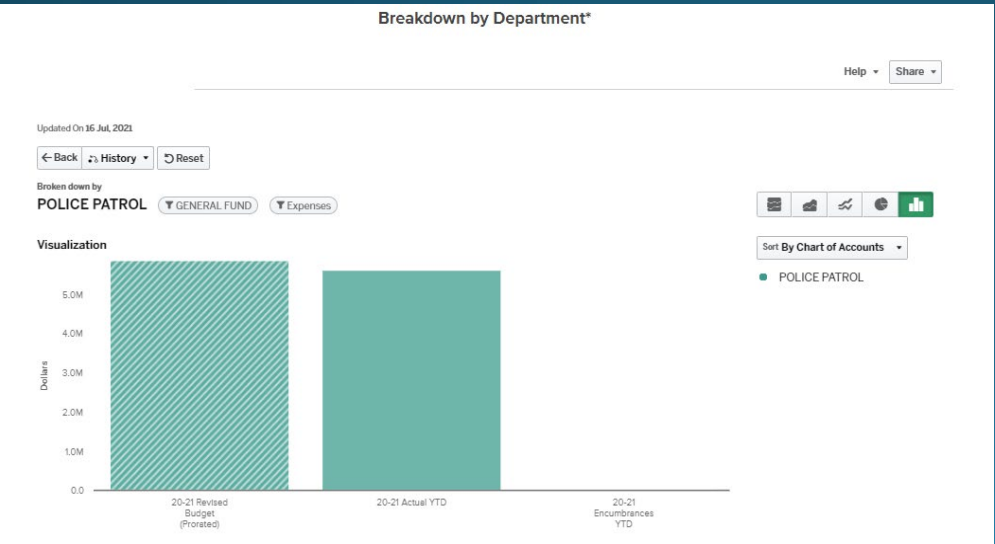
Initial View



Department Level

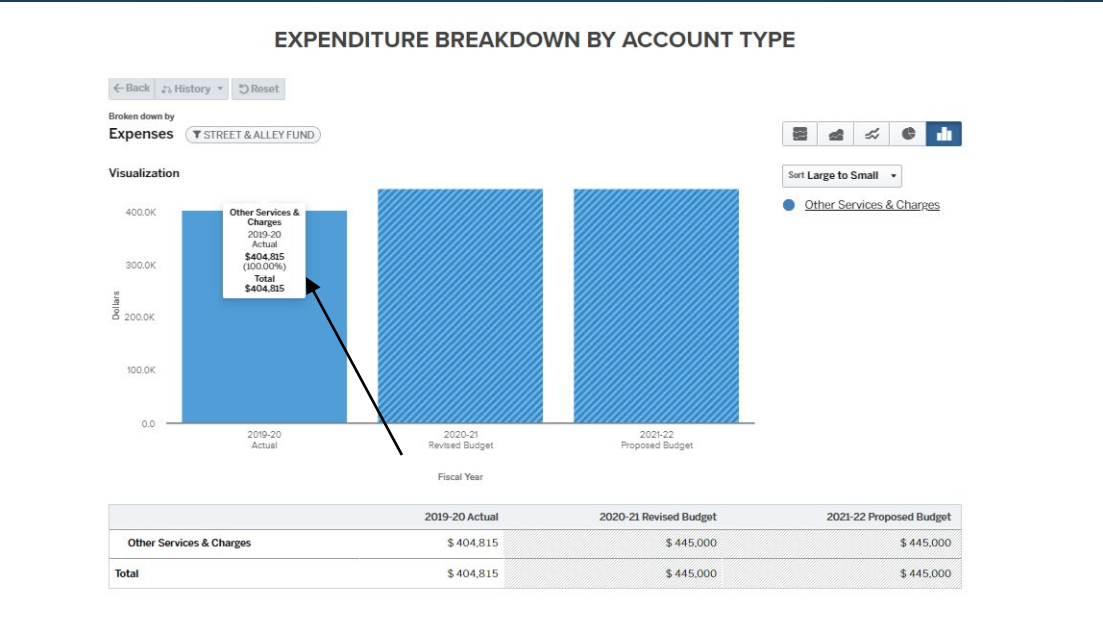


Division Level



Hovering to View Numbers

Hovering over each portion of a bar graph will show you the amount of a particular item.

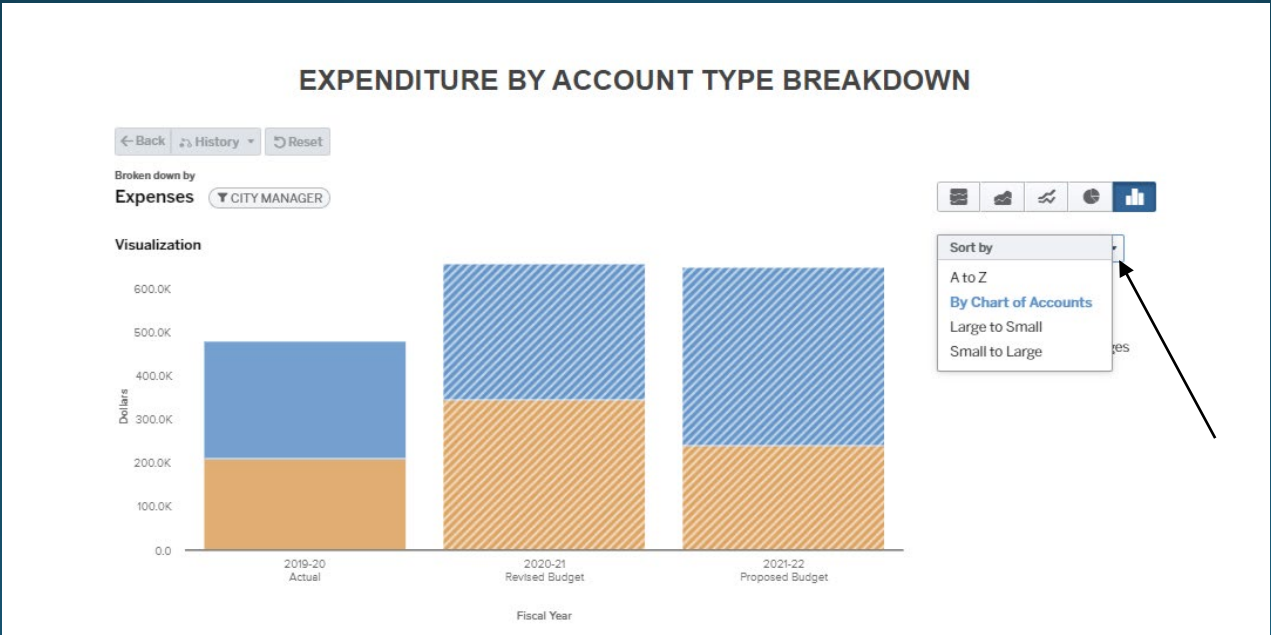


Sorting

Graphs may be sorted four ways:

- A to Z
- Chart of Accounts
- Smallest to Largest
- Largest to Smallest

To use this feature, please use the Sort By dropdown on the top right-hand corner of the graph.



Please Note: OpenGov information updates daily with current accounting records, and therefore, is subject to change if viewed subsequent to the original presentation date.



Tourism Department
2820 N Kickapoo Ave
Shawnee, OK

Date: January 21, 2025
To: Board of City Commissioners
From: Stacy Cramer Moore, Director of Tourism
Subject: Short-Term Rentals and the Occupancy Tax - Stacy Moore, Director of Tourism

Background: Short Term Rentals are a growing industry across the country. Shawnee is hosting between approximately 40 Short Term Rentals during busy months and approximately 10 Short Term Rentals during less busy months.

Several departments across the City of Shawnee are collaborating to help ensure the health and safety of guests staying at Short Term Rentals. City staff is working towards assisting owners of Short Term Rentals to support the registration of the facilities and the submittal of taxes.

As currently codified in the City of Shawnee Municipal Code, Sections 25-226 through 25-281, the Shawnee voter-approved Occupancy Tax is focused on *hotels and motels*, which is defined as “any building, structure, trailer or other facility in which the public may, for consideration, obtain sleeping accommodations in which three or more rooms are used for the accommodation of transient guests, whether such rooms are in one or several structures.” Given the current definition, and the fact that most Short Term Rentals are not comprised of three or more rooms, most Short Term Rentals would not fall under payment of Occupancy Tax.

In the future, the commission may choose to modify the current definition of *hotel or motel* from “three or more rooms” to “one or more rooms,” or other language determined by the City Commission, so long as the specific terms of the voter-approved occupancy tax proposition is not altered.

ORDINANCE NO. 2804NS Short Term Rentals

https://library.municode.com/ok/shawnee/ordinances/code_of_ordinances?nodeId=1285496

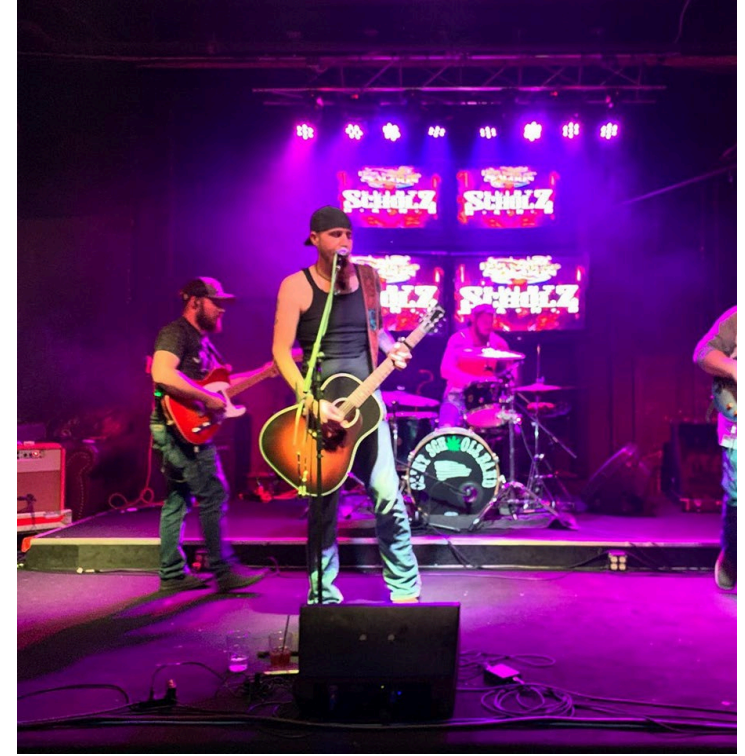
Chapter 25, Article IV OCCUPANCY SURCHARGE, Sec 25-226-281

https://library.municode.com/ok/shawnee/codes/code_of_ordinances?nodeId=PTIICOOR_CH25TA_ARTIVOCSU

Financial Impact: None at this time

Attachments: Tourism-Short Term Overview 2025

Staff Recommendation: [For information only]



Department of Tourism

Stacy Cramer Moore, Director of Tourism *and* Shawnee Film & Music Office

Visit Shawnee

Department of the City of Shawnee / July 2019



Shawnee's "Show Room"
2820 N Kickapoo

Just North of MacArthur
(China House & Heartland Home Health)

Welcome Center

VISIT SHAWNEE

WELCOME CENTER



**SHORT-TERM
RENTALS**

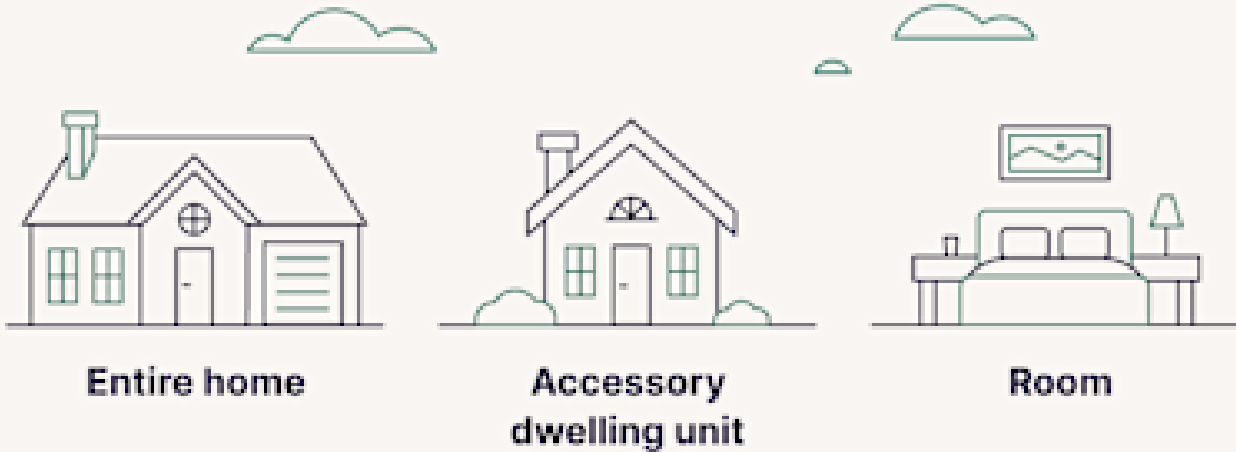


HomeSharing™



Opening a Short Term Rental in Shawnee

The three types of vacation rentals



Rental of **less than 30 days** for the purpose of generating extra income from the property.

The property may or may not also house the owner or a long-term renter.

The rental may be the entire house, an accessory dwelling, or a room.

What is a Short Term Rental?

RENTING OUT YOUR HOME FOR THE WEEKEND?

That's a short-term rental. Don't forget to register it!



Short Term Rentals are Businesses



OKLAHOMA
Secretary of State



OKLAHOMA
Tax Commission



Businesses Require Registration & Tax Collection



Oklahoma vacation rental property owners do not need specific documents when starting their business. What is required are the documents necessary for getting an EIN, a sales and use tax license, and those required by local authorities.

STARTING A NEW BUSINESS

5 Steps to Get Your Business Registered



1. CHOOSE A LEGAL STRUCTURE & BUSINESS NAME

Sole Proprietorship, General Partnership, Limited Liability Company (LLC), Corporation, etc.

Learn more about the different legal structures that exist by visiting the SBA's website:
sba.gov/business-guide/launch-your-business/choose-business-structure



2. REGISTER YOUR BUSINESS WITH THE STATE

If you are forming an LLC, partnership, non-profit, etc. you must file your business with the Secretary of State.

Find out more by visiting: sos.ok.gov/corp/filing.aspx



3. OBTAIN A FEDERAL TAX ID NUMBER

All businesses with employees (including those under the structure of a sole proprietorship) must obtain an Employer Identification Number (EIN) with the IRS. An EIN is free to obtain and may be filed electronically in most cases.

Find out more on the IRS website:
<https://www.irs.gov/businesses/small-businesses-self-employed/employer-id-numbers>



4. OBTAIN NECESSARY LOCAL AND STATE LICENSES AND PERMITS

Different "licenses" and "permits" may be required for various businesses to officially (or legally) operate in Oklahoma.

Get more specific information regarding licensing requirements at:
<https://www.okcommerce.gov/startups-entrepreneurs/licensing>



5. ADDITIONAL REQUIREMENTS AND FILINGS FOR BUSINESSES WITH EMPLOYEES

If a business in Oklahoma has actual employees, it will have additional state requirements and filings, including:

- » Income Tax Withholding Account – Oklahoma Tax Commission (OTC) 405-521-3160, tax.ok.gov
- » Unemployment Tax Computation & Payment – Oklahoma Employment Security Commission (OESC) oesc.ok.gov
- » Workers Compensation Insurance – Oklahoma Workers Compensation Commission (WCC), 405-522-3222, wcc.ok.gov



State of Oklahoma statute requires sales tax collection for any product or service not specifically identified as not needing to be collected.



Short Term Rental owners may be responsible for various federal taxes including income taxes. See your accounting professional for details.





*As a note, this is a simplified list. Short Term Rentals may come under the jurisdictions of other agencies such as the Oklahoma Health Department - *depending on services provided.*

The City of Shawnee requires Short Term Rentals to be registered under **ORDINANCE NO. 2804NS**

- The purpose of registration is to help maintain the character of our Shawnee neighborhoods.
- Give a mechanism to assist with ensuring guest safety and satisfaction.
- Provide a framework to oversee proper tax collections.
- Provide a mechanism to de-certify Short Term Rentals that are not being run in the spirit of our communities.

Businesses Require Registration & Tax Collection



Chapter 25, Article IV OCCUPANCY SURCHARGE, Sec 25-226-281

https://library.municode.com/ok/shawnee/codes/code_of_ordinances?nodeId=PTIICOR_CH25TA_ARTIVOC SU

- The **Occupancy Surcharge** is often called the Lodging Tax, Bed Tax, or the Hotel/Motel Tax.
- Originally passed in 1994 and again in 2004 via **vote of the people**.
- **Sec. 25-235. - Use of funds.**
 - Funds collected pursuant to this article shall be set aside and used exclusively for one or more of the following purposes:
 - (1) Encouraging, promoting and fostering visitor and tourism conventions, conferences and tourism development in the city.
 - (2) Solicitation of visitor attractions, events, tourism, conferences, conventions and meetings in the city.

Do I pay Hotel/Motel Tax on my Short Term Rental?

Chapter 25, Article IV OCCUPANCY SURCHARGE, Sec 25-226-281

https://library.municode.com/ok/shawnee/codes/code_of_ordinances?nodeId=PTIICOOR_CH25TA_ARTIVOCSU

- **Sec 25-266. - Levied**
 - There is levied an occupancy surcharge of **five percent upon the gross receipts from all occupancy of hotel and motel rooms**, or \$1.00 per occupied room per night for said occupancy, whichever is greater, within the city. This surcharge shall be in addition to any existing sales taxes imposed by the city or the state.
- **Sec. 25-227. - Definitions.**
 - The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:
 - **Hotel or motel means any building, structure, trailer or other facility in which the public may, for consideration, obtain sleeping accommodations in which three or more rooms are used for the accommodation of transient guests, whether such rooms are in one or several structures.** The term includes hotels; apartment hotels; motels; tourist homes, houses or courts; lodging houses; bed and breakfast inns; inns; rooming houses; trailer houses; trailer motels; and all other facilities where rooms or sleeping accommodations or space are furnished for a consideration. The term does not include hospitals, sanitariums, nursing homes, university dormitories or other educational or charitable institutions.

ANSWER: YES, if your short term rental is comprised of three or more rooms in one or several structures, you will be required to submit the Occupancy Surcharge via your OTC tax portal.



OK does not have short-term rental regulations at the state level. Associated regulation was left to municipalities.

Department of Tourism in collaboration with:

- **Community Development**
- **Engineering/Code Enforcement**
- **Fire Marshal's Office**
- **Finance**
- **Police Department**

Purchased Host Compliance software from Granicus as a service that can help:

- **Reduce negative impacts on community character.**
- **Increase guest safety and satisfaction.**
- **Locate property listings and owners.**
- **Educate hosts.**
- **Increase revenue to support our communities' priorities.**

How is City of Shawnee Tracking Short Term Rentals?



As of 1/1/2025, Granicus shows:

- Shawnee has 25 properties currently being rented (this ranges from ~10 to ~40)
- 20 property address identified
- 6% of our lodging rooms.

Application bit.ly/4jqUTpJ

Granicus uses AI to search nearly 200 rental sites for Shawnee area rentals, then matches those sites to addresses and owners.

Those reports are compared to databases for owners that are in compliance.

IN PROCESS:

- Owners that are not registered and out of compliance are notified of the registration process.
- Owners who choose not go through the registration and compliance process will fall into review.
- Granicus has a 24-hour complaint hotline with live operators.
- Granicus tracks tax collections.

How is City of Shawnee Tracking Short Term Rentals?



Please consult **ORDINANCE NO. 2804NS** for full specifics on registering your Short Term Rental.

AN ORDINANCE AMENDING SECTION 22-299 TO SECTION 22-309 OF THE ZONING CODE OF THE CITY OF SHAWNEE, POTTAWATOMIE COUNTY, OKLAHOMA, MORE SPECIFICALLY KNOWN AS RESERVED, TO **SHORT TERM RENTAL**, RESIDENTIAL. BY AMENDING SAID SECTIONS OF SAID ZONING CODE: PROVIDING FOR REPEAL; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR CODIFICATION.

https://library.municode.com/ok/shawnee/ordinances/code_of_ordinances?nodeId=1285496

General Criteria for Short Term Rentals



Department of Tourism - Stacy Cramer Moore & Michael Richard Savage
(405) 275-9780 - Stacy.Moore@shawneeok.org

Department of Community Development - Rian Harkins & Petya Stefanoff
(405) 878-1665 - Rian.Harkins@shawneeok.org

Shawnee Forward - Crystal Romanysyzn & Daniel Johnson
(405) 506-2732 - ceo@shawneeforward.com

GC Tech Center - Business, Workforce & Economic Development
Cama Watts – (405) 214-3256 – camaw@gctech.edu
Sarah Weeks – (405) 273-7493 - sarahw@gctech.edu

Oklahoma has many outstanding business and compliance assistance resources. Reach out! We are glad to help!

Where Do I Get Help?

Thank You!

VisitShawnee.com

We invite you to subscribe to our weekly newsletter of
Shawnee area events and activities at

VisitShawnee.com/Subscribe

2018 Half-cent Sales Tax Update

January 21, 2025

Kimberly Smith, Finance Director



2018 Sales Tax Election

- **“Proposition #4”** passed on June 26, 2018
- **Added 0.5% to existing sales tax**
- Revenue allocated for **capital improvements**
 - Public Safety: 0.125% sales tax or 25% of total
 - Streets/Roads: 0.125% sales tax or 25% of total
 - Parks/Public Facilities: 0.25% sales tax or 50% of total

Investment Updates

\$23.5 million in Sales Tax Collections

- Through January 2025 collections

\$25.1 million invested in Community Projects

- Through December 2024
 - \$3.8 million spent in FY24
 - \$2.9 million spent in FY25

Investment Updates – 2nd Qtr. FY25

\$205 k Santa Fe Depot Roof & Remodel

\$59 k Fire Station #3 Remodel

Public Safety	Original Allocation	New Allocation	Expensed to date	Status
Police Department Headquarters	\$3,200,000	\$4,339,268	\$4,339,268	Complete
Police Patrol Vehicles	\$1,250,000	\$1,098,727	\$1,098,727	Complete
Fire Station #1 & #3	\$1,750,000	\$1,906,519	\$249,122	Construction underway
Fire Engine	\$750,000	\$855,880	\$855,880	Complete
Fire Training Structure	\$300,000	\$50,195	\$50,195	Hold
Emergency Warning System	\$250,000	\$250,000	\$250,000	Complete
Total Public Safety	\$7,500,000	\$8,500,588	\$6,843,192	

Streets and Roads	Original Allocation	New Allocation	Expensed to date	Status
45th Street widening	\$3,500,000	\$4,500,588	\$512,924	ROW Acquisition
Pavement Overlays & Panel Replacements	\$4,000,000	\$4,000,000	\$2,813,753	Pressure Pave Complete
Total Streets & Roads	\$7,500,000	\$8,500,588	\$3,326,677	

Parks & Public Facilities	Original Allocation	New allocation	Expensed to date	Status
Implement Parks Master Plan	\$7,000,000	\$8,437,049	\$8,405,932	Complete
EXPO Enhancement & Remodel	\$3,500,000	\$3,500,000	\$1,696,723	Roof & Fence, Various equipment & repairs
Sidewalks & Trails	\$1,750,000	\$1,752,314	\$1,752,314	Complete
Santa Fe Depot	\$400,000	\$1,194,187	\$1,194,187	Roof Complete
Library	\$1,000,000	\$401,382	\$245,792	In planning
Senior Center	\$1,000,000	\$1,300,000	\$1,179,972	Roof project underway
Community Center	\$350,000	\$212,971	\$212,971	Complete
Unassigned	-	\$203,274	-	
Total Facilities	\$15,000,000	\$17,001,177	\$14,891,166	

A special “Thank You” to
the citizens of Shawnee
for their support!

